

L Number	Hits	Search Text	DB	Time stamp
-	2859151	@ad<=19990726	USPAT; US-PGPUB	2002/07/31 15:30
-	2859151	@ad<=19990726	USPAT; US-PGPUB	2002/07/31 15:29
-	750	707/513.ccls.	USPAT; US-PGPUB	2002/07/31 15:30
-	0	(707/513).CCLS. AND @ad<=1990726	USPAT; US-PGPUB	2002/07/31 15:30
-	546	(707/513).CCLS. AND @ad<=19990726	USPAT; US-PGPUB	2002/07/31 15:33
-	1	5402250.URPN.	USPAT	2002/07/31 15:32
-	410	(707/513).CCLS. AND @ad<=19990726 AND REQUEST\$4	USPAT; US-PGPUB	2002/07/31 15:35
-	581	partial\$ and xml and respons\$	USPAT; US-PGPUB	2002/07/31 15:36
-	574	partial\$4 and xml and respons\$4	USPAT; US-PGPUB	2002/07/31 15:36
-	28	partial\$4 and xml and respons\$4 and 707/513.ccls.	USPAT; US-PGPUB	2002/07/31 15:37
-	12	partial\$4 and xml and respons\$4 and 707/513.ccls. and @ad<=19990726	USPAT; US-PGPUB	2002/07/31 15:37
-	56	portion near5 xml	USPAT; US-PGPUB	2002/07/31 15:40
-	673	(prepar\$3 or send\$3 or receiv\$3) near5 portion near5 \$2ml	USPAT; US-PGPUB	2002/07/31 15:42
-	28	(prepar\$3 or send\$3 or receiv\$3) near5 portion near5 (xml or html)	USPAT; US-PGPUB	2002/07/31 15:47
-	0	20010054049.URPN.	USPAT	2002/07/31 15:46
-	3	portion\$4 near5 xml near5 tree	USPAT; US-PGPUB	2002/07/31 15:48
-	1330	"http request"	USPAT; US-PGPUB	2002/07/31 15:49
-	33	"xml request"	USPAT; US-PGPUB	2002/07/31 15:53
-	532	portion near5 response near5 request\$3	USPAT; US-PGPUB	2002/07/31 15:54
-	223	portion near3 response near3 request\$3 and @ad<=19990726	USPAT; US-PGPUB	2002/07/31 15:54
-	27	portion near3 response near3 request\$3 and @ad<=19990726 and (http or xml or html)	USPAT; US-PGPUB	2002/07/31 15:57
-	16	portion near3 response near3 request\$3 and @ad<=19990726 and "http request"	USPAT; US-PGPUB	2002/07/31 15:58
-	0	portion near3 "xml tree" and @ad<=19990726 and "http request"	USPAT; US-PGPUB	2002/07/31 15:58
-	0	portion near3 "xml tree" and "http request"	USPAT; US-PGPUB	2002/07/31 15:59
-	0	portion near3 "xml tree"	USPAT; US-PGPUB	2002/07/31 15:59
-	17	"xml tree"	USPAT; US-PGPUB	2002/07/31 15:59
-	0	partial near hierch\$ and xml	USPAT; US-PGPUB	2002/07/31 16:00
-	0	partial near hierch\$	USPAT; US-PGPUB	2002/07/31 16:00
-	1	partial near hierach\$ and xml	USPAT; US-PGPUB	2002/07/31 16:01
-	2	partial near hierach\$	USPAT; US-PGPUB	2002/07/31 16:01
-	6	709/20	USPAT; US-PGPUB	2002/08/01 13:35
-	602	709/230.ccls.	USPAT; US-PGPUB	2002/08/01 13:35
-	98	709/230.ccls. and http	USPAT; US-PGPUB	2002/08/01 13:36
-	67	709/230.ccls. and http and (partial\$4 or portion\$4)	USPAT; US-PGPUB	2002/08/01 13:37
-	0	709/230.ccls. and webdav and (partial\$4 or portion\$4)	USPAT; US-PGPUB	2002/08/01 13:38
-	0	709/230.ccls. and webdav	USPAT; US-PGPUB	2002/08/01 13:39

-	36	webdav	USPAT; US-PGPUB	2002/08/01 13:39
-	7	(portion\$4 or partial\$4) near3 (http or html or xml) near3 transfer\$4	USPAT; US-PGPUB	2002/08/01 13:45
-	26	(portion\$4 or part\$7) near3 (http or html or xml) near3 transfer\$4	USPAT; US-PGPUB	2002/08/01 13:43
-	4900	packet near transfer\$3	USPAT; US-PGPUB	2002/08/01 13:45
-	359	(packet near transfer\$3).ab.	USPAT; US-PGPUB	2002/08/01 13:45
-	372	(packet near transfer\$3).ab,ti.	USPAT; US-PGPUB	2002/08/01 13:46
-	1	(packet near transfer\$3).ab,ti. and xml	USPAT; US-PGPUB	2002/08/01 13:46
-	0	(packet near transfer\$3 near protocol).ti.	USPAT; US-PGPUB	2002/08/01 13:47
-	43	(packet near transfer\$3).ti.	USPAT; US-PGPUB	2002/08/01 13:47
-	0	(packet near transfer\$3).ti. and (709/230.ccls. and http)	USPAT; US-PGPUB	2002/08/01 13:47

-	49	(packet near transfer\$3).ti. and ("5911139" "5913205" "5915250" "5729754" "5893095" "5926190" "6317761" "5818463" "5890162" "6314451" "6397217" "5748956" "6181332" "6232974" "6266053" "5708845" "6111567" "6230167" "6343298" "5950215" "5969755" "6424370" "6175829" "6138088" "6148304" "5448679" "5818800" "6173287" "6275827" "6025837" "6128285" "6097380" "5909238" "6118860" "6046818" "6414686" "6083276" "6240423" "6317740" "6349114" "6044397" "6230130" "5983218" "5508734" "5841438" "6076734" "6164541" "5627748" "5712953" "5724605").pn. ("5752029" "5754851" "5757971" "5765152" "5883977" "5892507" "5963203" "5963954" "6011211" "6055337" "6096095" "6119123" "6166735" "6219671" "6219671" "6243708" "6411724" "6015949" "6345274" "6163817" "6381404" "5996015" "6128623" "6200003"	USPAT; US-PGPUB	2002/08/01 13:48
---	----	--	--------------------	------------------

-	0	(packet near transfer\$3).ti. and @ad<=1990726	USPAT; US-PGPUB	2002/08/01 13:48
-	27	(packet near transfer\$3).ti. and @ad<=19990726	USPAT; US-PGPUB	2002/08/01 13:49
-	38	prepar\$4 near5 xml	USPAT; US-PGPUB	2002/08/01 13:51
-	0	prepar\$4 near5 xml near5 (portion\$4 or part\$2 or partial\$3)	USPAT; US-PGPUB	2002/08/01 13:52
-	5	send\$4 near5 xml near5 (portion\$4 or part\$2 or partial\$3)	USPAT; US-PGPUB	2002/08/01 13:54
-	0	http near tranfer\$4	USPAT; US-PGPUB	2002/08/01 13:54
-	153	http near transfer\$4	USPAT; US-PGPUB	2002/08/01 13:55
-	93	http near transfer\$4 and @ad<=19990726	USPAT; US-PGPUB	2002/08/01 13:57
-	1	"request object" and "emitter object"	USPAT; US-PGPUB	2002/08/01 13:59
-	3	multistatus	USPAT; US-PGPUB	2002/08/01 15:00
-	1	6356906.URPN.	USPAT	2002/08/01 14:03
-	1	"5826258".PN.	USPAT	2002/08/01 14:04
-	1	"6083276".PN.	USPAT	2002/08/01 14:04
-	1	"6085186".PN.	USPAT	2002/08/01 14:04
-	69	xml and pipelin\$3	USPAT; US-PGPUB	2002/08/01 15:00
-	69	xml and pipelin\$4	USPAT; US-PGPUB	2002/08/01 15:00
-	2	xml near5 pipelin\$4	USPAT; US-PGPUB	2002/08/01 15:02
-	8	709/250.ccls. and xml	USPAT; US-PGPUB	2002/08/01 15:06
-	397	709/250.ccls. and (portion\$3 or partial\$3)	USPAT; US-PGPUB	2002/08/01 15:07
-	373	709/250.ccls. and (portion\$3)	USPAT; US-PGPUB	2002/08/01 15:07
-	110	709/250.ccls. and (partial\$3)	USPAT; US-PGPUB	2002/08/01 15:08
-	0	709/250.ccls. and webdav	USPAT; US-PGPUB	2002/08/01 15:09
-	4	709/250.ccls. and http near transfer\$4	USPAT; US-PGPUB	2002/08/01 15:25
-	1035	buffer\$3 near network	USPAT; US-PGPUB	2002/08/01 15:28
-	3	(buffer\$3 near network).ti.	USPAT; US-PGPUB	2002/08/01 16:08
-	29	709/250.ccls. and object?orient\$4	USPAT; US-PGPUB	2002/08/01 15:43
-	5	server\$1side near5 xml	USPAT; US-PGPUB	2002/08/01 15:44
-	103	object\$orient\$5 and network\$4 near transfer\$4	USPAT; US-PGPUB	2002/08/01 15:46
-	2	object\$orient\$5 same (network\$4 near transfer\$4)	USPAT; US-PGPUB	2002/08/01 15:56
-	18	xml near wrap\$4	USPAT; US-PGPUB	2002/08/01 15:58
-	166	send\$4 with buffer\$4 with threshold	USPAT; US-PGPUB	2002/08/01 16:09
-	135	send\$4 with buffer\$4 with threshold and @ad<=19990726	USPAT; US-PGPUB	2002/08/01 16:11
-	13	trans\$7 with buffer\$4 with threshold and @ad<=19990726	USPAT; US-PGPUB	2002/08/01 16:12
-	269	transfer\$4 with buffer\$4 with threshold and @ad<=19990726	USPAT; US-PGPUB	2002/08/01 16:13
-	26	transfer\$4 with buffer\$4 with threshold with full and @ad<=19990726	USPAT; US-PGPUB	2002/08/01 16:13



-	612	709/250.ccls.	USPAT; US-PGPUB	2002/08/01 16:16
-	537	709/250.ccls.	USPAT	2002/08/01 16:16
-	26	709/250.ccls. and object\$lorient\$4	USPAT	2002/08/01 16:19
-	0	707/103.ccls	USPAT	2002/08/01 16:19
-	0	707/103.ccls.	USPAT	2002/08/01 16:20
-	636	707/103?.ccls.	USPAT	2002/08/01 16:20
-	17	707/103x.ccls.	USPAT	2002/08/01 16:21
-	1	"emitter object" and "request object"	USPAT	2002/08/01 16:27
-	14	http and html and xml and wrapper	USPAT	2002/08/01 16:37
-	0	(soderberg-joel deen-brian).in.	USPAT	2002/08/01 16:31
-	0	(soderberg-joel or deen-brian).in.	USPAT	2002/08/01 16:30
-	0	soderberg-joel.in. or deen-brian.in.	USPAT	2002/08/01 16:30
-	4	(soderberg-joel\$ deen-brian\$).in.	USPAT	2002/08/01 16:31
-	3	quer\$4 near wrap\$4	USPAT	2002/08/01 16:42
-	631398	iis	USPAT	2002/08/01 16:42
-	4	"internet information sever"	USPAT	2002/08/01 16:48
-	2	"6356906"	USPAT	2002/08/01 16:55
-	1	"5826258".PN.	USPAT	2002/08/01 16:48
-	1	"6083276".PN.	USPAT	2002/08/01 16:48
-	1	"6085186".PN.	USPAT	2002/08/01 16:48
-	196	xml near pars\$4	USPAT; US-PGPUB	2002/08/02 11:16
-	2527	xml adjpars\$4	USPAT; US-PGPUB	2002/08/02 11:16
-	150	xml adj pars\$4	USPAT; US-PGPUB	2002/08/02 11:16
-	17	xml adj pars\$4 and @ad<=19990726	USPAT; US-PGPUB	2002/08/02 11:21
-	0	xml adj pars\$4 same partial and @ad<=19990726	USPAT; US-PGPUB	2002/08/02 11:18
-	1	xml adj pars\$4 same portion\$4 and @ad<=19990726	USPAT; US-PGPUB	2002/08/02 11:19
-	1	(xml near pars\$4).ti.	USPAT; US-PGPUB	2002/08/02 11:22
-	6	(xml near pars\$4).ti,ab.	USPAT; US-PGPUB	2002/08/02 11:24
-	46	(xml near pars\$4) and stack	USPAT; US-PGPUB	2002/08/02 11:25
-	5	(xml near pars\$4) same stack	USPAT; US-PGPUB	2002/08/02 11:25
-	12	"6012098"	USPAT; US-PGPUB	2002/08/02 12:31
-	1	"5828840".PN.	USPAT	2002/08/02 12:32
-	1	"5908469".PN.	USPAT	2002/08/02 12:32
-	1	"5924116".PN.	USPAT	2002/08/02 12:32
-	1	"5928323".PN.	USPAT	2002/08/02 12:32
-	1	"5935249".PN.	USPAT	2002/08/02 12:33

-	98	("6381627" "6411966" "5761678" "6038593" "5737599" "5819301" "5860074" "6272537" "6147687" "5777989" "5740362" "5875296" "6418448" "6189019" "6282281" "5937406" "5671225" "5815710" "5928335" "5613148" "5774655" "5928323" "5991802" "6044373" "6128644" "6233622" "6249291" "5548779" "5877765" "6091409" "6134583" "6230200" "6282542" "6289358" "6414684" "6425057" "5922074" "6249873" "6076092" "5892916" "5933849" "6154811" "6321372" "6338117" "6182111" "6199098" "5892935" "5918228" "5974566" "6154751").pn. or ("6338064" "6341352" "5491820" "6101509" "5956736" "5483652" "6324581" "6343287" "5677851" "6389460" "5694594" "6018741" "5588147" "6038610" "5655152" "6068661" "6219711" "6219711" "5928363" "6067559" "6157705" "6178160" "5609332" "5709332" "5864865" "5967706"	USPAT; US-PGPUB	2002/08/13 09:02
Search History 8/15/02 9:30:49 AM Page 6 C:\APPS\EAST\Workspaces\5709332\782-partial.xml.wsp				

-	5	("6381627" "6411966" "5761678" "6038593" "5737599" "5819301" "5860074" "6272537" "6147687" "5777989" "5740362" "5875296" "6418448" "6189019" "6282281" "5937406" "5671225" "5815710" "5928335" "5613148" "5774655" "5928323" "5991802" "6044373" "6128644" "6233622" "6249291" "5548779" "5877765" "6091409" "6134583" "6230200" "6282542" "6289358" "6414684" "6425057" "5922074" "6249873" "6076092" "5892916" "5933849" "6154811" "6321372" "6338117" "6182111" "6199098" "5892935" "5918228" "5974566" "6154751").pn. or ("6338064" "6341352" "5491820" "6101509" "5956736" "5483652" "6324581" "6343287" "5677851" "6389460" "5694594" "6018741" "5588147" "6038610" "5655152" "6068661" "6219711" "6219711" "5928363" "6067559" "6157705" "6178160" "5700833" "5700832" "5864865" "5867706"	USPAT; US-PGPUB	2002/08/12 17:33
---	---	--	--------------------	------------------

	98	<p>(response request object</p> <p>client document method particular</p> <p>structure data namespace tree</p> <p>element hierarchical</p> <p>portions dsig elements ) and ("6381627" "6411966" "5761678" "6038593" "5737599" "5819301" "5860074" "6272537" "6147687" "5777989" "5740362" "5875296" "6418448" "6189019" "6282281" "5937406" "5671225" "5815710" "5928335" "5613148" "5774655" "5928323" "5991802" "6044373" "6128644" "6233622" "6249291" "5548779" "5877765" "6091409" "6134583" "6230200" "6282542" "6289358" "6414684" "6425057" "5922074" "6249873" "6076092" "5892916" "5933849" "6154811" "6321372" "6338117" "6182111" "6199098" "5892935" "5918228" "5974566" "6154751" "6038593" "6341352" "5401820"</p>	USPAT; US-PGPUB	2002/08/13 09:17
--	----	--	--------------------	------------------

-	3	6055544.URPN.	USPAT	2002/08/13 09:16
-	1	5893109.pn.	USPAT;	2002/08/13 09:17
			US-PGPUB	
-	1	"5893109".PN.	USPAT	2002/08/13 09:18
-	1	"5634051".PN.	USPAT	2002/08/13 09:18
-	1	"5623652".PN.	USPAT	2002/08/13 09:18
-	1	"5613134".PN.	USPAT	2002/08/13 09:18
-	1	"5572643".PN.	USPAT	2002/08/13 09:18
-	1	"5557720".PN.	USPAT	2002/08/13 09:19
-	1	"5553284".PN.	USPAT	2002/08/13 09:19
-	1	"5530852".PN.	USPAT	2002/08/13 09:19

10/3,K/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02463670 SUPPLIER NUMBER: 68018201 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Extensible Markup Language Basics. (Technology Information)**  
Marco, Lou  
Enterprise Systems Journal, 15, 12, 49  
Dec, 2000  
ISSN: 1053-6566 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2872 LINE COUNT: 00264

... can create a markup language peculiar to her industry, and XML document authors can use this markup language to encode data in industry-specific terminology.

XML requires document authors to follow certain rules in creating what are known as well-formed XML documents. If these rules are not followed, the XML document is useless. The XML specification prohibits XML tools from trying to fix problems with the document. The intent is to stop the browser madness prevalent in HTML, where different browsers attempt to "fix" broken HTML in different ways and, of course, parse and display this HTML differently. For example, an HTML document author can write some HTML with missing end tags, which the major browsers will parse and display. Such foolishness cannot fly with XML; if an XML document is broken, the document cannot be rendered. Hence, an XML author can create XML documents secure in the knowledge that these documents will be parsed identically with different pieces of compliant software.

XML stresses the separation of data content from data presentation. Over time, HTML has blurred the distinction between organizing document content and displaying the content. A typical HTML document has tags that describe relationships among document content (like <LI> tags) and tags that govern the display of this content (<U>, <B>, etc.). XML describes document content structure and semantic relationships, not the content formatting. The XML author would use a related style sheet technology, like CSS (Cascading Style Sheets) or XSL (Extensible Style Language), to govern the display of the document...

10/3,K/2 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02443176 SUPPLIER NUMBER: 65491051 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**E-Biz XML: Challenges Remain. (Internet/Web/Online Service Information)**  
McVicker, Dee  
InternetWeek, 52  
Sept 25, 2000  
ISSN: 1096-9969 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 787 LINE COUNT: 00064

... open the door to these possibilities," says Howard Beader, the director of mobile solutions for SAP AG, whose mySAP.com mobile enterprise application has an XML interface.

XML is not intended to replace HTML as the universal language of the Internet. XML tags define the elements of content whereas HTML tags tell the browser how to display those elements. HTML has an understanding of the page layout of a Web catalog, for example, but it doesn't give any great meaning to the data fields within a catalog page.

XML's forte is that it can parse a document into elements for presentation and use it in a variety of applications. Documents also can be styled for a variety of devices so they can play as...

...17-inch monitor on the desktop or as a slimmed down version for the tiny screen of the Web phone.

Still, any honest dialogue about XML has to include its limitations. Slow performance is a concern. "It costs some CPU time to parse those XML files," said Bill Heye, the vice president of product strategy for BackWeb Technologies, which began shipping a new push

application server with. XML interface this month.

Developers also complain that XML doesn't communicate well with SQL databases. Lack of industry-standardized tag definitions is another concern, although...

10/3,K/3 (Item 3 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group. All rts. reserv.

02440360 SUPPLIER NUMBER: 65845328 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**DATABASES THAT FOCUS ON THE NET -- Updated versions of relational database management systems from IBM and Microsoft are Internet-aware, helping companies do business over the Net, but the capabilities included make the offerings appropriate for different customers.** (Product Information)

Ferrill, Paul

InformationWeek, 151

Oct 9, 2000

ISSN: 8750-6874 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2570 LINE COUNT: 00206

... XML documents. You can also use XML to directly update a database. All these features make it possible to completely drive the database from an XML basis.

XML is also the language of choice for other Microsoft offerings, such as BizTalk Server, the release of which has been pushed back to next year, and Commerce Server. SQL Server 2000 will function as a key backbone piece of Microsoft's .Net architecture. SQL Server 2000 supports XML Path Language queries, which give the developer the ability to access the database over HTTP using a URL address. The XPath standard is a World Wide Web Consortium recommendation that's now in the approval process.

IBM's XML support for DB2 includes the ability to parse XML documents into specific parts stored in DB2 tables. The DB2 XML Extender provides the ability to store an entire XML document or only specific pieces in the database. Users then can retrieve all or part of the document. At the same time, IBM has wrapped...

...SQL for Java applications bound to a DB2 database. DB2 also supports stored procedures written in Java. IBM's Net.Data scripting language now provides XML output and XHTML compatibility.

IBM and Microsoft paint a bright picture of the integration capabilities of their products. DB2 integrates exceptionally well with other IBM products as well...

10/3,K/4 (Item 4 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group. All rts. reserv.

02436614 SUPPLIER NUMBER: 65486644 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**SITE SAVVY: Anatomy of a Web site: Problems can and will occur along the way.** (Internet/Web/Online Service Information)

Wonnacott, Laura

InfoWorld, 22, 39, 72

Sept 25, 2000

ISSN: 0199-6649 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 649 LINE COUNT: 00052

... bit of content placed on the wire by the server. What's next? You guessed it -- "last byte received" by the client.

The browser then parses the HTML to discover the page's components. Finally, first object fetch, object access, and last object fetch occur. This includes the time required by the browser to request any images or components...

10/3,K/5 (Item 5 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group All rts. reserv.

02418105 SUPPLIER NUMBER: 62925857 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**EAI Books.**  
WILLEN, CLAUDIA  
Intelligent Enterprise, 3, 9, 76  
June 5, 2000  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 2029 LINE COUNT: 00177

... EAI, proper use of application servers, and how to interface with complex systems, including the latest ERP and CRM packaged applications.

Enterprise Application Integration With **XML** and Java by J.P. Morgenthal, June 2000, Prentice Hall Professional Technical Reference; 400 pages, \$44.99 list price, ISBN: 0130851353. (Includes CD-ROM.)

This title is billed as a guide to using Java and **XML** together to build real-world EAI solutions. Early chapters cover **XML** basics such as using **XML** to build the EAI infrastructure, identifying requirements for sharing and exchanging data, and building Java applications for **parsing** and processing **XML documents**. Later sections of the book examine how to move data between Java and non-Java applications, serialize Java objects into **XML**, use **XML** with relational databases, and message asynchronously with **XML**. The companion CD-ROM provides source code from the book, as well as software and trial versions of products, including: Bluestone Visual-**XML** desktop **XML** development environment; IBM XML4J Java-based parser; Push Technologies' SpritWAVE2 implementation of the Java Messaging Service; and WebMethod's BizView realtime **XML** Query Language interpreter. You can order it online at [www.phptr.com](http://www.phptr.com).

Enterprise Application Integration With CORBA: Component and Web-Based Solutions by Ron Zahavi...

10/3,K/6 (Item 6 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02403075 SUPPLIER NUMBER: 62140131 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Integrate Enterprise Applications with XML. (Technology Information)**  
Linthicum, David S.  
e-Business Advisor, 18, 5, 16  
May, 2000  
ISSN: 1098-8912 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2982 LINE COUNT: 00251

... a beginning and an ending tag. All XML documents contain an outermost element known as the root element, in which all other elements are contained. **XML** is also able to support nested elements, or elements within elements, which let **XML** support hierarchical structures. Element names describe the content of the element, and the structure describes the relationship between the elements.

An **XML** document is considered "well formed" (able to be read and understood by an **XML** parser) if it's in a format that complies with the **XML** specification, properly marked up, and its elements are properly nested. **XML** also supports the ability to define element attributes and describe element characteristics. This is contained within the beginning tag of an element.

The Document Type Definition (DTD) determines the **structure** and **elements** of an **XML** document. When a **parser** receives a document using a DTD, it makes sure the document is in the proper format.

**XML** parsers can read an **XML** document and extract the data for access by another program. Parsers are becoming part of the middleware layer (defined later), and can process **XML** documents in and out of the middleware infrastructure.

**XML** metadata can be any attribute assignable to a piece of data, from concrete to abstract concepts, such as the industry associated with a particular document. **XML** can also be used to encode any number of existing metadata standards. The binding of data and metadata is a key feature that makes XML...



10/3,K/7 (Item 7 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02398930 SUPPLIER NUMBER: 61952302 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**IBM Guns For Oracle Customers. (Product Information)**  
Booker, Ellis  
InternetWeek, 13  
April 17, 2000  
ISSN: 1096-9969 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 480 LINE COUNT: 00043

... DB2 version 7 are designed for e-business:  
- Net Search Extender, for fast, in-memory, full-text searches,  
including word/phrase, fuzzy and wildcard searches  
- **XML** Extender, for storing **XML** documents as a new column data  
type, or parsing the **XML** file and storing its components as columns  
in multiple tables  
- Updated Net.Data browser interface, with advanced **XML** support  
- Free copy of IBM WebSphere Application Server Standard Edition  
Source: IBM  
<http://www.internetwk.com/>  
Copyright (copyright) 2000 CMP Media Inc.

10/3,K/8 (Item 8 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02390152 SUPPLIER NUMBER: 61501773 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Analysis: The Platform Determines the Parser -- Although Sun's XML parser  
performs best, it's impossible to declare a winner. You should use the  
parser that comes with the development environment you've chosen. (Company  
Business and Marketing)**  
Abualsamid, Ahmad  
Network Computing, 69  
April 3, 2000  
ISSN: 1046-4468 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 1651 LINE COUNT: 00133

... trouble with some UTF-16 characters, which, as noted earlier, is a  
common problem with many parsers and will cause issues with some  
non-English **XML** documents.

Invalid documents caused the parser to report fatal errors instead of  
reporting the invalid parts and continue parsing the rest of the  
document .

We had no problems using the parser, and it is small enough (about  
700 KB) to be downloaded over the Web as part of an applet. However, the  
leading browsers are beginning to provide **XML** integration natively;  
therefore, it is hard to justify using an external, albeit downloadable,  
**XML** parser. The IBM parser can be used in a server environment, especially  
as part of a larger IBM offering that allows integration of the **XML** tools  
with IBM's DB2 database. It is available for commercial use.

**XML4J**, available for free download at  
[www.alphaworks.ibm.com/tech/xml4j](http://www.alphaworks.ibm.com/tech/xml4j), IBM...and it can't be used to build a  
commercial product. It is available for download following free  
registration on Oracle's Technology Network (OTN).

**XML** Parser for Java, available for free download at  
[technet.oracle.com/tech/xml](http://technet.oracle.com/tech/xml) , Oracle Technology Network, (800) 672-2531,  
(650) 506-7000

Sun Microsystems Java Project X

Sun's design goal was to conform to the **XML** standard perfectly, and  
Java Project X, the **XML** parser available at [java.sun.com/products/xml](http://java.sun.com/products/xml) ,  
meets that challenge. Technology Release 2 passed our tests with 100  
percent accuracy.

The parser can run in both validating and nonvalidating modes. It can

be connected to a DOM implementation; therefore, it can run as a tree-based parser and easily function as part of an XML-editor application. Sun has aggressive plans for this parser, one of which is to make it the reference implementation of Java Standard Extension for XML. Unlike Oracle's parser, Sun's Java Project X is available for commercial use.

Java Project X, available for free download  
at [java.sun.com/products/xml/index.html](http://java.sun.com/products/xml/index.html), Sun Microsystems, (888) 843-5282

Ahmad Abualsamid is the founder of Apical Consulting, a Chicago-based software consulting and contract programming firm. Send your comments on this article to him at [ahmad@apicalconsulting.com](mailto:ahmad@apicalconsulting.com).

#### Web Links

"Vendors Debut XML Development Tools" (InternetWeek, Nov. 11, 1999)  
[www.internetwk.com/story/INW19991111S0007](http://www.internetwk.com/story/INW19991111S0007)

"XML: The Language of Integration" (InformationWeek, Nov. 1, 1999)  
[www.informationweek.com/759/xml...](http://www.informationweek.com/759/xml...)

10/3,K/9 (Item 9 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02386674 SUPPLIER NUMBER: 61209901 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**A Metalanguage For the Ages -- HTML can make a Web document attractive, but XML lets you create a language that also gives meaning to every word in your document.** (Internet/Web/Online Service Information) (Buyers Guide)  
Abualsamid, Ahmad  
Network Computing, 69  
April 3, 2000  
DOCUMENT TYPE: Buyers Guide ISSN: 1046-4468 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 2574 LINE COUNT: 00203

... then the sample document would be invalid. It would still be well-formed and available for viewing in a browser or storage in a database.

XML parsers also can be event-based, tree-based or both. ...the parser for the element's data. The event-based approach is highly effective when the application is interested in only a subset of the elements in a sequential fashion.

A tree-based parser looks at the XML document's DTD and determines whether the document follows the rules by representing the document in a tree-like data structure. In the Burns and...  
...compiler's, which reads a program's source code, parses it and generates an intermediate, tree-like representation of the source code.

We examined leading XML parsers from IBM Corp., Microsoft Corp., Oracle Corp., Sun Microsystems and James Clark, an independent software developer who played a major part in developing the...

10/3,K/10 (Item 10 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02374950 SUPPLIER NUMBER: 59599941 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Webwriter. (from Stilo Technologies) (Product Announcement)**  
Internet Magazine, 131  
Feb, 2000  
DOCUMENT TYPE: Product Announcement ISSN: 1355-6428 LANGUAGE:  
English RECORD TYPE: Fulltext  
WORD COUNT: 897 LINE COUNT: 00077

... players will be introducing fully compliant browsers in the near future. In the meantime, you can start to familiarise yourself with the programming intricacies of XML with Webwriter.

It's one of the first XML editors on the market and comes from Stilo ([www.stilo.com](http://www.stilo.com)). Webwriter is a robust program, but it appears to

have literally rolled c the beta test line considering the bare functionality of the workspace. The program lets you prepare all the elements of an XML document- including the DTD (Document Type Description) - and output the document as either XML or HTML .

A tour of the package using your browser in both HTML and XML takes you through all the aspects of designing valid and well formed documents . Webwriter has some particularly useful features, including partial parsing and document content validation. Full parsing of documents is only carried out when the document is loaded, though.

The tour shows you basic XML document design using a telephone message system as an example. This includes assigning customised content styles - which is unique to Webwriter-and outputting the document as well formed or valid XML , or HTML with an associated CSS file.

Anyone studying XML will appreciate Webwriter's ability to extract DTDs from documents. It takes away the graft of writing a DTD from scratch, though since the derived...

10/3,K/11 (Item 11 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02306046 SUPPLIER NUMBER: 54890933 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Developing with Internet Explorer 5.0.(Product Information)**  
Lam, John  
PC Magazine, 258  
July 1, 1999  
ISSN: 0888-8507 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2802 LINE COUNT: 00222

... ensures that the document is correctly rerendered to reflect those changes. User interfaces can be built on the fly simply by building strings that contain HTML element sequences and having the browser parse the strings to modify the HTML object tree. Figure 2 illustrates this procedure, using JavaScript to add some HTML button elements to an existing <DIV> element in the parsed HTML tree .

The Document Object Model forms the core of DHTML , defining properties and methods for individual objects within the HTML tree, as well as how individual object types (document, paragraph, or list element, for example) can be manipulated through script. It does so by defining...

...type. An interface is simply a grouping of related methods and properties (such as the IHTMLElement interface that specifies properties and methods common to all HTML elements). In no way, however, does the DOM attempt to stipulate how the objects are to be implemented.

Microsoft chose to use the Component Object...

10/3,K/12 (Item 12 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02253238 SUPPLIER NUMBER: 53404141 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Oracle plans XML support in 8i.(Oracle 8i database ) (Product Announcement)**  
Seybold Report on Internet Publishing, 3, 4, NA(1)  
Dec, 1998  
DOCUMENT TYPE: Product Announcement ISSN: 1090-4808 LANGUAGE:  
English RECORD TYPE: Fulltext  
WORD COUNT: 1679 LINE COUNT: 00133

... Both user-defined and built-in metadata about the files may be entered as conventional fielded data, or may be fed to the database in XML

Even more interesting, files that are XML documents get built-in support for defining, parsing and reassembling XML documents from XML components . Using Oracle's DTD-like iFS Document Type Definition, the administrator tells the database how to load documents of the new file type. According to...

...should be able to map an element (and its subelements) as a fragment into a Character LOB." The database then has built-in support for parsing these documents, breaking them into components and re-assembling them for export. (Oracle speaks of database support for "rendering" XML-based file types, but what is meant is reassembling the document's components, not necessarily displaying them on the screen.)

Validation of the XML-based file type's content occurs when the file is saved, posted or received by e-mail into the Internet File System, leveraging the validation capability of the Oracle XML Parser.

XML-enabled searching. On the search side, Oracle's ConText engine, part of the Oracle 8i's InterMedia content-management facilities, now allows searches to be...

10/3,K/13 (Item 13 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02239406 SUPPLIER NUMBER: 53218002 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
The XML Infusion. (Microsoft) (Company Business and Marketing)  
Rupley, Sebastian  
PC Magazine, 29(1)  
Dec 15, 1998  
ISSN: 0888-8507 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 352 LINE COUNT: 00031

XML is an important new complement to such architectural underpinnings of the Web as Java and HTML. XML is designed to tag the locations of critical information in Web documents. Based on elements such as text parsing, tree management, and formatting, XML tagging is an advanced card catalog for a library of Web pages.

For example, you might XML-tag a page containing the complete text of a book so that a search engine or database could search on precise passages in it. Information in HTML-based table format on the Web now will also be XML-tagged, so spreadsheets and databases will be able to import and sort such tables easily, without losing formatting.

Building XML support into Windows will mean that the OS can be used on the server side to exchange data between application servers on various platforms, and...

10/3,K/14 (Item 14 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02190190 SUPPLIER NUMBER: 20846766 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Aeneid Aids Quest for Personal Web Searches. (Internet Research Assistant) (Product Announcement)  
Hannon, Brian  
PC Week, v15, n25, p26(1)  
June 22, 1998  
DOCUMENT TYPE: Product Announcement ISSN: 0740-1604 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 322 LINE COUNT: 00027

... information from the Web from preconfigured data sources.

A split-screen view in the application displays a list of search results in Java and an HTML view of the individual stories or other pieces of information. A graph of a search result shows the number of items collected from each data source. Passing a mouse over each item, represented by a small graphic, brings up a thumbnail or story synopsis.

XML support enables IRA users in various corporate departments to pull up sections of documents specific to their needs. A metastructure menu provides a guide to the document parts, which can also be parsed from HTML documents.

"They've already got a leap on others in search," said J.P. Morgenthal, president of Hewlett, N.Y., consulting company NC.Focus,

explaining that...

10/3,K/15 (Item 15 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02180133 SUPPLIER NUMBER: 20652548 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**The XML Invasion.(Extensible Markup Language) (Internet/Web/Online Service Information) (Brief Article)**  
Rupley, Sebastian  
PC Magazine, v17, n10, p30(1)  
May 26, 1998  
DOCUMENT TYPE: Brief Article ISSN: 0888-8507 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 417 LINE COUNT: 00036

The Web is getting set for a makeover. Touted as "the second coming of the Web" by the World Wide Web Consortium, **XML** (Extensible Markup Language) is an important new complement to such architectural underpinnings of the Web as Java and **HTML**. Proponents claim that it can free the Web from dependence on inflexible document types and revolutionize Web searching, Web databases, and Web information exchange.

**XML** is designed to tag the locations of critical information in **Web documents**. It's based on **SGML**, a standard for defining descriptions of the **structure** and content of electronic **document** types. Using **elements** such as text **parsing**, **tree** management, and formatting, **XML** tags are a sort of advanced, electronically searchable card catalog for a "library" of Web pages. (For a more technical look at **XML**, see "Structuring Data with **XML**" in this issue's PC Tech section.)

For example, you might **XML**-tag a page containing a Shakespeare play so that not just the page but precise passages in it and references associated to it could be searchable by a search engine or a database. Information in **HTML**-based table format on the Web now (such as stock-price tables) can also be **XML**-tagged, so spreadsheets and databases will easily be able to import, format, and sort such tables.

Microsoft, Netscape, and other developers are currently working on...

10/3,K/16 (Item 16 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02166317 SUPPLIER NUMBER: 20053403 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**More on Web technologies.(scripting languages) (Internet/Web/Online Service Information)**  
Mione, Antonino  
Digital Systems Report, v19, n3, p26(10)  
Fall, 1997  
ISSN: 1086-9638 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 3672 LINE COUNT: 00357

... Adopt those technologies that have been proven and are in wide use after a year or two.

JavaScript to Increment and Decrement a Text Field

```
< html >
<head>
<script language=JavaScript>
<!-- Hide from non-robust browsers
function incrval () {
    var tv;
    // Fetch the values of the two form elements
    tv = parseInt ( document .forms(0). elements ( 0 ).value);
    document .forms (0).elements( 0 ).value = ++tv;
}
function decrval () {
    var tv;
    // Fetch the values of the two form elements
```

```

        tv = parseInt ( document .forms(0). elements ( 0 ).value);
        document .forms (0).elements( 0 ).value = ++tv;
    }
    // -->
</script>
</head>
<body>
<NONSCRIPT>
<STRONG>
Your browser does not support JavaScript or it is not enabled. To
see the...

```

```

...0><p>
    <input type=button name="IncrVal" value="Increment Value"
        onClick=increval ()>
    <input type=button name="IncrVal" value="Decrement Value"
        onClick=decreval ()><P>
</form>
</body>
</ html >

```

VBscript Operators  
Mathematical Operators

Operator	Example
+	x + y
-	x - y
*	x * y
/	x / y
\	x \ y
Mod	x Mod Y

Y  
Relational Operators  
Operator...

10/3,K/17 (Item 17 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02032647 SUPPLIER NUMBER: 19102631 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Freedom from formatting. (building Web pages quickly) (includes related  
article on specifying a font size in rich text format, tips for working  
with rich text) (Technology Tutorial)(Tutorial)  
Bonner, Paul  
Windows Sources, v5, n3, p189(2)  
March, 1997  
DOCUMENT TYPE: Tutorial ISSN: 1065-9641 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 1460 LINE COUNT: 00119

... similar access to most of the same capabilities. So the challenging  
part of building the custom editor was devising ways to convert its output  
to **HTML** for display in the ThtmlViewer, and ways to convert that **HTML**  
back into rich text when further editing was necessary.

Trial and Thinking

My initial impulse was to use Win 95's rich text control's built-in  
ability to output RTF files and to then have my custom component parse  
that file, substituting **HTML** tags for RTF codes. (Like **HTML**  
documents, RTF files consist of ASCII text with embedded codes that specify  
style and formatting.) But all I really know about the RTF spec is...  
...search facility called FindText, which returns to the starting position  
of the text that it finds. This is the point at which you insert an **HTML**  
tag, so I used FindText as a key element in my RTF-to-HTML conversion  
routine.

For instance, to insert **HTML** tags that signal alignment...

10/3,K/18 (Item 18 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01961988 SUPPLIER NUMBER: 18510635 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Take control of the Internet. (Microsoft's free Internet Control Pack)**  
**(Settings: Taskbar) (includes related articles on use of the Internet**  
**Control Pack with Borland's Delphi 2.0, and on tips for controlling**  
**Internet operations) (Product Support) (Column) (Tutorial)**

Bonner, Paul

Windows Sources, v4, n8, p223(2)

August, 1996

DOCUMENT TYPE: Column Tutorial ISSN: 1065-9641 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1143 LINE COUNT: 00092

... www.microsoft.com/icp; Microsoft Corp.; 800-426-9400; 206-882-8080.

Related article: Quick Tips

Control Internet Operations

1. Examine and respond to Web- page elements while the HTML component parses the page. Set the component's ElemNotification property to True, then add code to the DoNewElement event-handler method.
2. Stream ICP data to a file. Set the component's...

10/3,K/19 (Item 19 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group. All rts. reserv.

01944825 SUPPLIER NUMBER: 18368814 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Microsoft aims for control. (Microsoft Internet Control Pack development**  
**utility) (Software Review) (Evaluation)**

Bonner, Paul

Windows Sources, v4, n7, p58(2)

July, 1996

DOCUMENT TYPE: Evaluation ISSN: 1065-9641 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 695 LINE COUNT: 00060

... which originally displayed the current Web page's source code alongside a hierarchical tree-view outline of its structure, to display the page in an HTML component. It took only a few lines of code to do so. The tree-structured URL hierarchy, which we retained from the original HTTP Explorer project, made browsing complex Web sites a breeze. We replaced the original display of the HTML source code with a Web-browser view.

Although you may never need to venture beyond the ICP components' high-level interfaces, ICP also makes low-level information and functions available. For instance, the HTML component's HTMLAttr and HTMLForm object collections provide ways for you to parse documents, element by element, and manipulate the data in Web-page forms on a field-by-field basis. Both would be useful if you wanted to build an application...

10/3,K/20 (Item 20 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group. All rts. reserv.

01895718 SUPPLIER NUMBER: 17892211 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**SGML crosses technology-adoption chasm into the bowling alley. (Technology**  
**Information)**

Walter, Mark; Karsh, Arlene

Seybold Report on Publishing Systems, v25, n9, p3(13)

Jan 29, 1996

ISSN: 0736-7260 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 9268 LINE COUNT: 00734

... son Martin and two colleagues -- Stephen Buswell and Steve Healey -- originally wanted to create a wysiwyg front end to TeX, but then became intrigued by sgml. They obtained a Welsh technology grant and developed

their product, which made its debut last spring at the **sgml** Europe conference. This was its first public showing in the U.S. and our first look at the product.

No frills, no flash. The Stilo **sgml** document generator is a Macintosh text editor designed specifically for **sgml** documents. It has four **components**: an interactive **sgml** parser, a text editor, a graphical dtd display and a multiple-file document manager. A pc version is slated for release in the next few months.

The parser, written by Stilo, interacts with the dtd display and editor. It has the advantage of working with raw **sgml**; the dtd does not need to be compiled as in some products.

The heart of the program is the text editor, which operates as a guided **sgml** text editor. Based on the dtd, the program steps a user through the hierarchy, inserting the next structural element each time the return key is...

10/3,K/21 (Item 21 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01894784 SUPPLIER NUMBER: 17894367  
**Microstar creates structured SGML documents in Word. (Microstar Software's Near & Far Author SGML document generator package) (Product Announcement)**  
Casselmann, Grace  
Info Canada, v21, n1, p24(1)  
Jan, 1996  
DOCUMENT TYPE: Product Announcement ISSN: 1187-7081 LANGUAGE:  
English RECORD TYPE: Abstract

ABSTRACT: Microstar Software introduces Near & Far Author **SGML** editing tool to help users create **structured documents** in the **SGML** format. Near & Far Author uses a graphical model as guide and structure to enable users to store documents as Word files or as **SGML** files. Microstar Pres Shaun McEwan said that the standard structure offered by **SGML** offers an opportunity to solve the document crisis prevalent today. McEwan believes that **SGML** allows users greater manageability and allows them to easily publish information in multiple formats. A senior **SGML** analyst beta tested Near & Far Author and said the software is a good alternative for leading users through the process of creating a **structured document**, allowing them to import **SGML** documents into Word. However, the analyst warned the software may have problems dealing with poorly **parsed** or **partial SGML documents**. Near & Far Author will be sold at \$336 until the end of Jan 1996, subsequently rising to \$440; a Windows 95 version is anticipated for...

10/3,K/22 (Item 22 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01888930 SUPPLIER NUMBER: 17783719 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Caere and Xerox update OCR apps. (Xerox TextBridge Professional 3.0; Caere OmniPage Pro 6.0) (Product Announcement) (Brief Article)**  
Rothenberg, Matthew  
MacWEEK, v10, n2, p4(1)  
Jan 15, 1996  
DOCUMENT TYPE: Product Announcement Brief Article ISSN: 0892-8118  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 264 LINE COUNT: 00023

... and offer easier access to OCR from within other applications, the companies said.

OmniPage Pro 6.0, available now for \$499, also features output to **HTML** files. According to Caere, Version 6.0 reduces recognition errors by 26 percent. The company said it has added a new algorithm for verifying characters in context and introduced a new **parser** for **page elements**.

In addition, OmniPage Pro 6.0 includes a help system based on Apple



Guide, an Apple menu item that initiates scans and a new tool...

10/3,K/23 (Item 23 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01804862 SUPPLIER NUMBER: 17159732 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Internet document databases arrive. (The Information Atrium's LivePAGE SGML  
document storage software) (Product Announcement)  
Fuller, Arthur  
Data Based Advisor, v13, n5, p32(3)  
June, 1995  
DOCUMENT TYPE: Product Announcement ISSN: 0740-5200 LANGUAGE:  
English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2898 LINE COUNT: 00230

... or a CD-ROM. In the world of intelligent documents, these  
distinctions are trivial. The document is virtualized, freed from its  
container.

Components of an SGML document

SGML is an attempt to free textual data from its containers. Word  
processors typically embed a document's formatting instructions directly  
within the text. Whatever its merits, this approach imprisons the text  
within its container. SGML divides the distributes the information among  
several files, according to the type of information. Any SGML document  
consists of at least two components: Document Type Definition--This  
component describes the structure of the  
document as well as the rule set of the  
document structure. The parser reads  
this component to validate the structure  
of any incoming text, then warns you if  
any tags are missing or incorrect. In  
addition, the SGML document also  
needs some formatting instructions, but  
various vendors handle this in different  
ways. Some store the components in  
separate files, some store everything in...

...Autocad files.").

Besides these, your text could include any number of external  
objects--spreadsheets, graphics, WAV files, video, and AutoCAD files.

Next, you need what SGML calls a Transformer--a browser that reads  
the components and presents the result in a form that can be printed on the  
target platform. Printed...

10/3,K/24 (Item 24 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01722805 SUPPLIER NUMBER: 16052233 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Adept\*Editor. (ArborText's portable document software, version 5.2) (one of  
three evaluations of hypertext editing tools in "SGML and HTML: Tag  
Masters") (Software Review) (Evaluation)  
Karney, James  
PC Magazine, v14, n3, p152(2)  
Feb 7, 1995  
DOCUMENT TYPE: Evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 1013 LINE COUNT: 00079

ABSTRACT: ArborText's \$1,350 Adept\*Editor 5.2 hypertext tool provides an  
exhaustive array of functions for formatting documents in the Standard  
Generalized Markup Language ( SGML ) format used in electronic  
publishing on the Internet. Editor works with ArborText's companion \$4,950  
Document Architect for Windows 5.2 product, which creates and edits  
document type definition (DTD) files essential to the SGML process.

Editor readily imports files and processes them with its integral SGML parser to screen out illegal document elements. However, Editor's poorly-labeled menus and toolbar items may mystify some users. Editor offers useful features, such as a hypertext table of contents generator...

10/3,K/25 (Item 25 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01712723 SUPPLIER NUMBER: 16241389 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
SGML tools: Microsoft into the act. (Standard Generalized Markup Language)  
(Seybold Special Report: Seybold San Francisco '94, part 3) (Product Announcement)  
Seybold Report on Publishing Systems, v24, n4, pS32(6)  
Oct 31, 1994  
DOCUMENT TYPE: Product Announcement ISSN: 0736-7260 LANGUAGE:  
ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 4225 LINE COUNT: 00330

... need SureStyle Pro.

SoftQuad cleans up after Microsoft  
SoftQuad introduced a new product, Enactor, that helps clean up errors in files created using Microsoft's Sgml Author. SoftQuad also announced (but gave few details about) a new, free package that will allow users of the Mosaic World Wide Web browser to view arbitrary sgml files. In addition, the current state of several other recently announced products was shown.

Enactor. Enactor is a companion to Microsoft's new Sgml Author for Word. It comes into play after a document has been created and the author has invoked the "Save as sgml" command. At this point, the parser in Sgml Author may generate error messages and may insert new elements into the file to make it parse properly. These messages and elements have to be reviewed, and, in many cases, the document tagging may need to be altered.

The sgml Enactor provides an environment for dealing with these parsing problems. The software takes you straight to any messages created by Sgml Author (they are embedded as comments in the file) and it helps you resolve them. If you make changes, Enactor validates them interactively, making sure...

...of the dtd. Context-sensitive menus are provided that will allow only valid constructions to be added to the document.

Enactor also helps you implement sgml constructs that are difficult or impossible with Sgml Author alone. For example, it could be used to implement marked sections (optional text that is included...

10/3,K/26 (Item 26 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01702041 SUPPLIER NUMBER: 16214408 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Seybold Paris, part II: composition systems, color and output. (includes related article on Chromapress digital print shop)  
Alexander, George A.; Edwards, Stephen E.; Karsh, Arlene E.; Tribute, Andrew; Walter, Mark  
Seybold Report on Publishing Systems, v23, n20, p11(19)  
July 20, 1994  
ISSN: 0736-7260 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 14647 LINE COUNT: 01118

... sets the level of granularity (the selectable levels of the hierarchy) of the database modeling in the control files. These can be different for different document types and document classes.

SINDA parses the incoming document, breaks it into components and stuffs the components into the database. When text is stored in the database, SINDA keeps a representation of its place in the hierarchy within

...SINDA can write pointers to the file system instead of to the database. STEP says it is able to navigate for retrieval the hierarchy of **sgml** documents stored as text files, but we were unable to see in our demo if this navigation was more than pointing to chunks stored at...

10/3,K/27 (Item 27 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01689852 SUPPLIER NUMBER: 15399636 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Delivery and retrieval technology. (Seybold Special Report: Seybold  
Seminars Boston '94, Part II)**  
Seybold Report on Publishing Systems, v23, n16, pS20(16)  
May 10, 1994  
ISSN: 0736-7260 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 16097 LINE COUNT: 01272

... fields, rather than as **sgml** attributes. With DynaBase, EBT expects to store metadata within the document, but the company said it is not limited to **sgml** attributes -- it just doesn't have a client application that creates or views non-**sgml** metadata. EBT says it will support non-**sgml** metadata as an extension of the DynaText query language until such time as Shamrock solidifies.

Likewise, EBT does not have a user interface for viewing...

...looking at a biographical sketch in the context of a book, encyclopedia and multimedia product), but the database does have two methods of handling such **elements**. Well-formed **document** subtrees can be **parsed** when handed to another program in the context of each of their references or within the context of a specific dtd. Just within the limited...

10/3,K/28 (Item 28 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01552817 SUPPLIER NUMBER: 13343996 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Datalogics adds OS/2 SGML editor to suite: new WriterStation features API,  
Presentation Manager user interface. (The Latest Word) (WriterStation/PM  
Standard Generalized Markup Language-compliant document editing software  
package) (Brief Article) (Product Announcement)**  
Seybold Report on Publishing Systems, v22, n7, p24(1)  
Dec 21, 1992  
DOCUMENT TYPE: Product Announcement ISSN: 0736-7260 LANGUAGE:  
ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 826 LINE COUNT: 00068

... called TextWrite (Vol. 19, No. 9, pp. 18-20). Although WriterStation/PM looks similar to TextWrite, it differs in several respects: it uses a different **SGML** parser and a different spelling checker, and it includes an interprocess communication programming interface.

The parser is based on the "SGMLS" parser donated by Charles Goldfarb to the **SGML** user community. Any valid DTD may be used. The parser, invoked on command, parses an entire file without leaving the editing session.

The batch parser is complemented by technology that validates portions of a document within WriterStation/PM, making possible real-time **SGML** validation during editing. Invalid structures are identified through error displays. Tagging feedback during editing is accomplished by **partial parsing** of the **document**, using a **condition file** set up to match the DTD.

The spelling checker, by Proximity, supports user-defined dictionaries, which may be shared across a network. The checking process...

...Original file.

The API, based on Dynamic Data Exchange (DDE) interprocess communication, is the most significant difference between TextWrite and WriterStation/PM. With it, the **SGML** editor can be linked to other programs to create custom applications.

Such a link would make it possible to extract or verify information external to...

10/3,K/29 (Item 29 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01460453 SUPPLIER NUMBER: 11444956 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**TagWrite enforces consistent publishing style. (Zandar Corp.'s TagWrite for Windows 3.0) (Software Review) (First Looks) (evaluation)**

Karney, James

PC Magazine, v10, n20, p58(1)

Nov 26, 1991

DOCUMENT TYPE: evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 454 LINE COUNT: 00036

...ABSTRACT: 395 TagWrite for Windows is a helpful utility program that can insert tagging codes for Aldus' PageMaker, Xerox's Ventura Publisher and the Standard Generalized **Markup Language (SGML)**. TagWrite accepts word processing source code and translates it into a marked-up file. The product provides two **components** including a **parser** that reads ASCII, WordPerfect or RTF files and a template with instructions for the parser. Users can use an included sample template that can be...

10/3,K/30 (Item 1 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2002 The Gale group. All rts. reserv.

03961589 SUPPLIER NUMBER: 14506985 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Ontario Hydro and SGML. (Special Section: Standard Generalized Markup Language)**

Rockley, Ann

Technical Communication, v40, n3, p383(4)

August, 1993

ISSN: 0049-3155 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 2030 LINE COUNT: 00163

... of the training. EBT converted this documentation for us so that we could take the training using our own document.

Since Dynatext does not create **SGML** files, we needed to find a way to convert the existing DCF-coded files. We looked at translation software but found the cost was too high for this phase of the project. We decided to use WordPerfect and create a series of macros to convert the documents to **SGML**.

Dynatext does not require a DTD. The software assumes that you have used a DTD to create and parse the documents. We did not create a DTD for the prototype document. We used the book compilation facility in Dynatext to **parse** the files.

The hardest **parts** to convert and integrate were the tables and graphics. Tables are very difficult to code in **SGML**, so we contacted SoftQuad in Toronto, which sells both an **SGML** editor called Author/Editor and an **SGML** table editor. They provided us with evaluation copies which we used extensively.

The graphics, which were almost exclusively flowcharts, were originally created in DCF. They could not be replicated in **SGML**, so they were redrawn with a graphics package.

Training on the Dynatext software, design of the document, and the conversion of the selected prototype book...

10/3,K/31 (Item 2 .om file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2002 The Gale group. All rts. reserv.

03897229 SUPPLIER NUMBER: 14081894 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Introducing today's SGML. (Standard General Markup Language, publishing technology) (Tutorial)**  
Gilmore, Elizabeth  
Technical Communication, v40, n2, p210(9)  
May, 1993  
ISSN: 0049-3155 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 5583 LINE COUNT: 00445

... than the computer or software used to produce the latest edition  
(Alexander and Walter 1990).

These issues are nudging publication groups toward taking advantage of  
**SGML** 's achievement in providing well-behaved "handles" for each **piece**  
of a **document** and the fact that an **SGML parser** can guarantee  
consistent **structure** in the input **documents** because these features  
prepare documents to become text databases. More and more, **SGML** 's power  
is perceived as its ability to define documents as information resources.  
When encoded with **SGML** , documents are no longer long streams of text with  
no handles for grabbing useful chunks of information; they look more like  
minidatabases (Wright 1992).

Titles taken from the program for **SGML** '92 (Graphic Communications  
Association 1992), the conference for the **SGML** technical community,  
indicate the current focus on using **SGML** to represent information for  
databases:

- SGML** : Extending and Confining Object-Based Software
- SGML** as Foundation for a Post-Relational Database Model
- Comparative Implementations of the SGML/Search Query Language
- Structured Queries and Location Models
- The Development of a...

10/3,K/32 (Item 1 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou. (R)  
(c) 2002 The Gale Group. All rts. reserv.

02545286 Supplier Number: 62854556 (USE FORMAT 7 FOR FULLTEXT)  
**Fast Moving e-Learning ASP Upgrades Technology and Expands Capacity;**  
**VCampus Prepares to Deliver Up to One Million Courses Per Month to Meet**  
**Projected Demand From Customers.**  
Business Wire, p2372  
June 21, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 809

... they create.

Like previous releases of the VCampus courseware platform, CDE 2000  
is integrated with an Author Assembly and Publishing system that provides  
user-definable **page** navigation, learning object **component** uploads, **XML**  
**parsing** , a glossary, headers and footers, and communication vehicles.

In addition, VCampus provides eight hour per day courseware technical  
help at no charge, as well as...

10/3,K/33 (Item 2 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou. (R)  
(c) 2002 The Gale Group. All rts. reserv.

01753648 Supplier Number: 53205254 (USE FORMAT 7 FOR FULLTEXT)  
**Oracle Enhances Internet Platform With XML Support.**  
PR Newswire, p1048  
Nov 11, 1998  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade

Word Count: 1036

... Web applications through Oracle's world-class family of development tools. Oracle tools will make it easy to build database-driven Internet applications that exploit **XML** on the Oracle Internet Computing platform.

Oracle XML Support Enhances Oracle8i and iFS; Crosses Entire Internet Platform

Oracle's comprehensive **XML** support, which will extend from Oracle8i to Oracle Application Server 4.0 to Oracle Tools, is based on industry standards that enjoy broad support throughout the computer industry, and firmly establishes Oracle's Internet platform as the platform of choice for IT executives, programmers, and third-party software providers pursuing **XML**'s rich content and interoperability benefits.

**XML** support in Oracle8i is comprised of three key components: The Oracle **XML Parser** provides programmatic processing of **XML documents** or **document fragments**. Oracle iFS (Internet File System), the new next-generation file system included with Oracle8i that gives users "write once, read anywhere" content in a heterogeneous enterprise, will include **XML** support to automate parsing and rendering of data between **XML** and the database. In addition, **XML**-enabled "section searching" in Oracle interMedia will provide more precise searches over **structured documents**.

Oracle: Committed to Open Industry Standards

Today Oracle also announced several **XML** related initiatives underway within the company. Oracle is actively participating in the World Wide Web Consortium (W3C) process with other corporations committed to furthering open...

10/3,K/34 (Item 3 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2002 The Gale Group. All rts. reserv.

01672268 Supplier Number: 50144971 (USE FORMAT 7 FOR FULLTEXT)

**Object International Announces Platform-Independent UML Modeling and Simultaneous Round-Trip Engineering.**

Business Wire, p07061209

July 6, 1998

Language: English Record Type: Fulltext

Article Type: Article

Document Type: Newswire; Trade

Word Count: 916

... category), view management with autoupdate (physical and logical package content), source and diagram-layout files (as scalable as your file system itself)

5. Documentation generation ( **HTML** doc gen. Frames and image maps of all diagrams.(+) Clicking on a class member in the generated image displays the corresponding text documentation.(+) )

6. External...

...to Rose(+)

8. IDL generation(+)

9. Extensive configurability(+) (key system properties are now modifiable in configuration file, including: text editor tab size, highlighting of diagram **elements**, code generation and **parser** blueprints, **file** templates, default stereotype list, stereotypes in color)

10. Versatile in-place diagram editing (Full-declaration editing of attributes and operations.(+) In-place editing of link...

10/3,K/35 (Item 4 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2002 The Gale Group. All rts. reserv.

01205106 Supplier Number: 43402955 (USE FORMAT 7 FOR FULLTEXT)

**Datalogics Announces WriterStation/PM**

News Release, p1  
Oct 27, 1992  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 527

... the graphic's location and launches the associated editor.  
Multiple graphic entities can be viewed and edited through windows to their external programs.

Real-time **SGML** tag validation is provided in WriterStation/PM. Invalid structures are identified through error displays for immediate user notification. Complete **SGML** document validation is extended through WriterStation/PM's New Parsing (NP) technology. Built on the SGMLS parser, NP is invoked to parse an entire file while in a WriterStation/PM session. Interactive editing and **parsing of partial documents** is supported through initial condition files that WriterStation/PM uses to create a formatted **SGML** environment for document segments.

WriterStation/PM is designed for integration with complex client-server and **SGML** database environments. WriterStation/PM's Application Programming Interface provides this capability by enabling the application designer to customize the WriterStation/PM interface and communication functionality.

Specific applications to the API include developing templates for **SGML** data entry, passing and sharing information between WriterStation/PM and other applications, and creating specialized menus and menu options based on application and user criteria...

10/3,K/36 (Item 1 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

04795991 Supplier Number: 65730944 (USE FORMAT 7 FOR FULLTEXT)  
**NRC to Allow Surry ISFSI to Take SF With Higher Burnup, Enrichment.**  
Nuclear Waste News, v20, n38, pNA  
Sept 28, 2000  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 246

... heat generation limits were increased to 1.02 kilowatts per assembly.

Virginia Power's request for a license amendment is available from the Publicly Available **Records ( PARS ) component** of NRC's ADAMS electronic **document** system, available on Web site:  
<http://www.nrc.gov/NRC/ADAMS/index.html> .

Contact: William Brach, director, Spent Fuel Project Office, Nuclear Materials Safety and

10/3,K/37 (Item 2 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

04019418 Supplier Number: 53243093 (USE FORMAT 7 FOR FULLTEXT)  
**ORACLE: Oracle enhances Internet platform with XML support.**  
M2 Presswire, pNA  
Nov 18, 1998  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 942

... Web applications through Oracle's world-class family of development

tools. Oracle tools will make it easy to build database-driven Internet applications that exploit XML on the Oracle Internet Computing platform.

Oracle XML Support Enhances Oracle8i and iFS; Crosses Entire Internet Platform Oracle's comprehensive XML support, which will extend from Oracle8i to Oracle Application Server 4.0 to Oracle Tools, is based on industry standards that enjoy broad support throughout the computer industry, and firmly establishes Oracle's Internet platform as the platform of choice for IT executives, programmers, and third-party software providers pursuing XML's rich content and interoperability benefits.

XML support in Oracle8i is comprised of three key components: The Oracle XML Parser provides programmatic processing of XML documents or document fragments. Oracle iFS (Internet File System), the new next-generation file system included with Oracle8i that gives users "write once, read anywhere" content in a heterogeneous enterprise, will include XML support to automate parsing and rendering of data between XML and the database. In addition, XML-enabled "section searching" in Oracle interMedia will provide more precise searches over structured documents.

Committed to Open Industry Standards, today Oracle also announced several XML related initiatives underway within the company. Oracle is actively participating in the World Wide Web Consortium (W3C) process with other corporations committed to furthering open...

10/3,K/38 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

06264961 Supplier Number: 54353812 (USE FORMAT 7 FOR FULLTEXT)  
XML Marks the Spot; The new Web language is ready to redefine information management. (Company Operations)  
Udell, Jon  
Computerworld, p84(1)  
April 12, 1999  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Tabloid; Trade  
Word Count: 1172

... Still a fledgling technology, XML is often called "HTML on steroids." Others think of it as a simplified version of the old-fashioned Standard Generalized Markup Language (SGML) that gave birth to HTML. But though there's some truth to both visions, XML isn't just another markup language. It's rapidly becoming the key enabler of the emerging, object-oriented Web.

Applying strict information-management discipline to document collections has been a serious...

...Boeing Co., for example, the documentation for a 777 jetliner must be engineered as precisely as any other component of the airplane. The company uses SGML and Document Type Definitions (DTD) to define the schemas for that document database and employs parser-based tools that can literally take a document apart, analyze its components and catalog them appropriately. Writing manuals with SGML is much more complicated up front, but the documentation that results can be easily validated and its content transformed later on for other purposes.

#### Lax Enforcement

Though HTML is defined by an SGML DTD, browsers have never been very strict about enforcing it. But that laxity was actually a good thing in the early days of the Internet: It made Web-page authoring a snap and let anyone get into the Web game easily. But now that HTML has become the language of the Net, sloppiness is less tolerable.

XML adds the rigor and precision of SGML without affecting the huge installed base of HTML pages already on the Internet. It does that very cleverly...

10/3,K/39 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)



(c) 2002 The Gale Group. All rts. reserv.

05474766 Supplier Number: 48296947 (USE FORMAT 7 FOR FULLTEXT)  
**DataChannel's betas support XML standard**  
Walsh, Jeff  
InfoWorld, p020  
Feb 16, 1998  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 295

The beta release of DataChannel XML Parser 1.0 is a Java-based XML parser that enables server-side XML parsing and integration. Application developers can use the parser to make their applications XML-aware by importing XML data into their data structure.

The DataChannel XML Parser is part of the DataChannel XML Developer Toolkit, which will be available this quarter and also includes the Pax Syntactica, a lightweight XML parser; the DataChannel XML Viewer, an applet that uses the Pax Syntactica parser to enable users to walk and view XML tree data; the XML Server, a server that supports a database schema for managing and distributing meta data; and a CDF Viewer demo, a preview of the upcoming DataChannel...

10/3,K/40 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

04979160 Supplier Number: 47314792 (USE FORMAT 7 FOR FULLTEXT)  
**Web page parts get integrated**  
DelRossi, Robert A.  
InfoWorld, p64A  
April 21, 1997  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 717

... by Visual JavaScript is poorly formatted, thus difficult to read.  
The Structure view offers the most interesting look at the page I constructed. Essentially, the sections of my page are parsed and displayed as parts of a collapsible tree outline. Double-clicking on the < HTML > tag, for instance, revealed <HEAD> and <BODY> tags. Like the other views, this outline view let me edit the page contents.  
With several components placed...

10/3,K/41 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2002 The Gale Group. All rts. reserv.

04783750 SUPPLIER NUMBER: 08702512 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Microsystems Engineering tests software for CALS' first phase.**  
(Computer-Aided Acquisition and Logistics Support)  
Hosinski, Joan M.  
Government Computer News, v9, n15, p57(2)  
July 23, 1990  
ISSN: 0738-4300 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 457 LINE COUNT: 00037

... control, security and access to the document.  
CSS also includes an XGML, engine from Software Exoterica Corp. of Ottawa, Canada.  
The engine performs Standard Generalized Markup Language ( SGML ) tagging and parsing , which validates sections of a document as writers and editors work on the document. "This approach was selected and packaged so that future improvements and modifications could be easily added to...

10/3,K/42 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

02076024 62456135

**Databases that focus on the Net**

Ferrill, Paul  
Informationweek n807 PP: 151-158 Oct 9, 2000  
ISSN: 8750-6874 JRNL CODE: IWK  
WORD COUNT: 2489

...TEXT: XML documents. You can also use XML to directly update a database. All these features make it possible to completely drive the database from an XML basis.

XML is also the language of choice for other Microsoft offerings, such as BizTalk Server, the release of which has been pushed back to next year, and Commerce Server. SQL Server 2000 will function as a key backbone piece of Microsoft's Net architecture. SQL Server 2000 supports XML Path Language queries, which give the developer the ability to access the database over HTTP using a URL address. The XPath standard is a World Wide Web Consortium recommendation that's now in the approval process.

IBM's XML support for DB2 includes the ability to parse XML documents into specific parts stored in DB2 tables. The DB2 XML Extender provides the ability to store an entire XML document or only specific pieces in the database. Users then can retrieve all or part of the document. At the same time, IBM has wrapped...

... SQL for Java applications bound to a DB2 database. DB2 also supports stored procedures written in Java. IBM's Net.Data scripting language now provides XML output and XHTML compatibility.

IBM and Microsoft paint a bright picture of the integration capabilities of their products. DB2 integrates exceptionally well with other IBM products as well...

10/3,K/43 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01852463 05-03455

**The state of the Dublin Core Metadata Initiative: April 1999**

Weibel, Stuart  
American Society for Information Science. Bulletin v25n5 PP: 18-22  
Jun/Jul 1999  
ISSN: 0095-4403 JRNL CODE: BAS  
WORD COUNT: 3902

...TEXT: Core metadata is not, however, dependent on the deployment of RDF. Useful systems have been, and will continue to be, developed using simpler syntactical expressions (HTML or raw XML, for example).

Why add the additional complexity of RDF? The answer has to do primarily with the additional constraints that RDF imposes on the expression...

... schemas in RDF will make it possible for applications to access a particular schema from a publicly accessible registry on the Web and retrieve the parsing structure and semantics of the element set. This does not ensure either searching or interchange interoperability among metadata sets, but it makes the job of achieving it easier. [For a discussion...

10/3,K/44 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)

(c) 2002 ProQuest Info& Learning. All rts. reserv.

01566778 02-17767

**X marks the spot**

Carifio, Mike

CIO v11n8 (Section 2) PP: 54-58 Feb 1, 1998

ISSN: 0894-9301 JRNL CODE: CIO

ABSTRACT: The **Extensible** Markup Language (XML) is a markup language like **HTML**. Unlike **HTML**, **XML** is extensible, meaning that the author is free to invent new tags. **XML** gives users 2 very powerful languages to parse the tags and then to render them. Each document is given a type and the parser for each type is implicitly described by a set of rules that says how tags are composed. An **XML** processor can incorporate tag rules and **parse** the document. **Parsing** produces a **parse tree**, which comprises named **pieces**. The **tree** can be traversed or manipulated either with ECMAScript within a Web browser or with the **XML** style language **XS**, a Scheme-like expression language. The precise details of the tree and its relationship to ECMAScript data structures form the document object model. Just as the **XML** document-type definition has a parse rule associated with each tag, the **XS** style sheet has a function for each tag. **XS** is the least refined piece of the **XML** standard and probably the most complicated to use in theory and in practice.

10/3,K/45 (Item 4 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2002 ProQuest Info& Learning. All rts. reserv.

01555766 02-06755

**CGI chugs away**

Barney, Doug

Network World v14n50 PP: I20, I26 Dec 15, 1997

ISSN: 0887-7661 JRNL CODE: NWW

WORD COUNT: 1146

...TEXT: the intranet provided the best vehicle for distributing news articles, which it gets in bulk, to specific employees. Programmers wrote an application in Perl that **parses** these articles and **partially** prepares the **HTML** **pages** that contain them. Based on the date or another variable, a CGI application, also written in Perl, dynamically builds the rest of the page with...

10/3,K/46 (Item 1 from file: 9)

DIALOG(R)File 9:Business & Industry(R)

(c) 2002 Resp. DB Svcs. All rts. reserv.

02776835 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**IBM Guns For Oracle Customers**

(IBM prepares DB2 upgrade designed to make it easier for developers to migrate applications to the database)

InternetWeek, p 13

April 17, 2000

DOCUMENT TYPE: Journal ISSN: 0746-8121 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 462

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...DB2 version 7 are designed for e-business:

- Net Search Extender, for fast, in-memory, full-text searches, including word/phrase, fuzzy and wildcard searches

- **XML** Extender, for storing **XML** documents as a new column data type, or parsing the **XML** file and storing its components as columns in

multiple tables

- Updated Net.Data browser interface, with advanced XML support
- Free copy of IBM WebSphere Application Server Standard Edition

Source: IBM

<http://www.internetwk.com/>

April 17, 2000

10/3,K/47 (Item 1 from file: 810)  
DIALOG(R)File 810:Business Wire  
(c) 1999 Business Wire . All rts. reserv.

0944277 BW1036

**O'REILLY & ASSOCIATES: New Perl Module Enables Application Developers to Use XML; Expands Capabilities for Business-to-Business Communication of Data and Language**

November 25, 1998

Byline: Business Editors/High-Tech Writers

SEBASTOPOL, Calif.--(BUSINESS WIRE)--Nov. 25, 1998--Perl is the language operating behind the scenes of most dynamic Web sites.

XML ( Extensible Markup Language ) is emerging as a core standard for Web development. Now a new Perl module (or extension) known as XML ::Parser allows Perl programmers building applications to use XML , and provides an efficient, easy way to parse (break down and process) XML document parts .

Perl is renowned for its superior text processing capabilities; XML is text that contains markup tags and structures. Thus Perl's support for XML offers a natural expansion of the capabilities of both.

" XML ::Parser makes it almost trivially easy for Perl programmers to process XML documents," explained Larry Wall, who did the initial work on XML ::Parser. Wall is the creator of Perl and Senior Programmer with O'Reilly & Associates. "More than that, it's actually a repertoire of interfaces, each one optimized for a different style of processing."

Tim Bray, one of the designers of XML and co-editor of the XML specification, demonstrated XML::Parser to an enthusiastic gathering during his tutorial at the recent XML conference in Chicago. One...

10/3,K/48 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2002 CMP Media, LLC. All rts. reserv.

01224449 CMP ACCESSION NUMBER: IWK20001009S0044  
**DATABASES THAT FOCUS ON THE NET - Updated versions of relational database management systems from IBM and Microsoft are Internet-aware, helping companies do business over the Net, but the capabilities included make the offerings appropriate for different customers**

Paul Ferrill  
INFORMATIONWEEK, 2000, n 807, PG151  
PUBLICATION DATE: 001009  
JOURNAL CODE: IWK LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: TECH ANALYZER  
WORD COUNT: 2404

... XML documents. You can also use XML to directly update a database. All these features make it possible to completely drive the database from

an XML basis.

XML is also the language of choice for other Microsoft offerings, such as BizTalk Server, the release of which has been pushed back to next year, and Commerce Server. SQL Server 2000 will function as a key backbone piece of Microsoft's .Net architecture. SQL Server 2000 supports XML Path Language queries, which give the developer the ability to access the database over HTTP using a URL address. The XPath standard is a World Wide Web Consortium recommendation that's now in the approval process.

IBM's XML support for DB2 includes the ability to parse XML documents into specific parts stored in DB2 tables. The DB2 XML Extender provides the ability to store an entire XML document or only specific pieces in the database. Users then can retrieve all or part of the document. At the same time, IBM has wrapped...

...SQL for Java applications bound to a DB2 database. DB2 also supports stored procedures written in Java. IBM's Net.Data scripting language now provides XML output and XHTML compatibility.

IBM and Microsoft paint a bright picture of the integration capabilities of their products. DB2 integrates exceptionally well with other IBM products as well...

10/3,K/49 (Item 2 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2002 CMP Media, LLC. All rts. reserv.

01223556 CMP ACCESSION NUMBER: INW20000925S0051  
E-Biz XML: Challenges Remain  
DEE MCVICKER  
INTERNETWEEK, 2000, n 830, PG52  
PUBLICATION DATE: 000925  
JOURNAL CODE: INW LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: NET INFRASTRUCTURE  
WORD COUNT: 744

... open the door to these possibilities," says Howard Beader, the director of mobile solutions for SAP AG, whose mySAP.com mobile enterprise application has an XML interface.

XML is not intended to replace HTML as the universal language of the Internet. XML tags define the elements of content whereas HTML tags tell the browser how to display those elements. HTML has an understanding of the page layout of a Web catalog, for example, but it doesn't give any great meaning to the data fields within a catalog page.

XML's forte is that it can parse a document into elements for presentation and use it in a variety of applications. Documents also can be styled for a variety of devices so they can play as...  
...17-inch monitor on the desktop or as a slimmed down version for the tiny screen of the Web phone.

Still, any honest dialogue about XML has to include its limitations. Slow performance is a concern. "It costs some CPU time to parse those XML files," said Bill Heye, the vice president of product strategy for BackWeb Technologies, which began shipping a new push application server with XML interface this month.

Developers also complain that XML doesn't communicate well with SQL databases. Lack of industry-standardized tag definitions is another concern, although...

10/3,K/50 (Item 3 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext

(c) 2002 CMP Media, LLC All rts. reserv.

01213816 CMP ACCESSION NUMBER: INW20000417S0018

**IBM Guns For Oracle Customers**

ELLIS BOOKER

INTERNETWEEK, 2000, n 809, PG13

PUBLICATION DATE: 000417

JOURNAL CODE: INW LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: NEWS & ANALYSIS

WORD COUNT: 471

... DB2 version 7 are designed for e-business:

- Net Search Extender, for fast, in-memory, full-text searches, including word/phrase, fuzzy and wildcard searches
- XML Extender, for storing XML documents as a new column data type, or parsing the XML file and storing its components as columns in multiple tables
- Updated Net.Data browser interface, with advanced XML support
- Free copy of IBM WebSphere Application Server Standard Edition

Source: IBM

<http://www.internetwk.com/>

Copyright 2000 CMP Media Inc.

10/3,K/51 (Item 4 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext

(c) 2002 CMP Media, LLC. All rts. reserv.

01212892 CMP ACCESSION NUMBER: NWC20000403S0020

**Analysis: The Platform Determines the Parser - Although Sun's XML parser performs best, it's impossible to declare a winner. You should use the parser that comes with the development environment you've chosen.**

Ahmad Abualsamid

NETWORK COMPUTING, 2000, n 1106, PG69

PUBLICATION DATE: 000403

JOURNAL CODE: NWC LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: Feature - XML Parsers

WORD COUNT: 1550

... trouble with some UTF-16 characters, which, as noted earlier, is a common problem with many parsers and will cause issues with some non-English XML documents.

Invalid documents caused the parser to report fatal errors instead of reporting the invalid parts and continue parsing the rest of the document .

We had no problems using the parser, and it is small enough (about 700 KB) to be downloaded over the Web as part of an applet. However, the leading browsers are beginning to provide XML integration natively; therefore, it is hard to justify using an external, albeit downloadable, XML parser. The IBM parser can be used in a server environment, especially as part of a larger IBM offering that allows integration of the XML tools with IBM's DB2 database. It is available for commercial use.

XML4J, available for free download at [www.alphaworks.ibm.com/tech/xml4j](http://www.alphaworks.ibm.com/tech/xml4j), IBM...and it can't be used to build a commercial product. It is available for download following free registration on Oracle's Technology Network(OTN).

**XML** Parser for Java, available for free download at [technet.oracle.com/tech/xml](http://technet.oracle.com/tech/xml) , Oracle Technology Network, (800) 672-2531 , (650) 506-7000

#### Sun Microsystems Java Project X

Sun's design goal was to conform to the **XML** standard perfectly, and Java Project X, the **XML** parser available at [java.sun.com/products/xml](http://java.sun.com/products/xml) , meets that challenge. Technology Release 2 passed our tests with 100 percent accuracy.

The parser can run in both validating and nonvalidating modes. It can be connected to a DOM implementation; therefore, it can run as a **tree**-based **parser** and easily function as **part** of an **XML**-editor application. Sun has aggressive plans for this parser, one of which is to make it the reference implementation of Java Standard Extension for **XML** . Unlike Oracle's parser, Sun's Java Project X is available for commercial use.

Java Project X, available for free download

at [java.sun.com/products/xml/index.html](http://java.sun.com/products/xml/index.html) , Sun Microsystems, (888) 843-5282

Ahmad Abualsamid is the founder of Apical Consulting, a Chicago-based software consulting and contract programming firm. Send your comments on this article to him at [ahmad@apicalconsulting.com](mailto:ahmad@apicalconsulting.com).

#### Web Links

"Vendors Debut **XML** Development Tools" (InternetWeek, Nov. 11, 1999) [www.internetwk.com/story/INW19991111S0007](http://www.internetwk.com/story/INW19991111S0007)

"XML: The Language of Integration" (InformationWeek, Nov. 1, 1999) [www.informationweek.com/759/xml...](http://www.informationweek.com/759/xml...)

10/3,K/52 (Item 5 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2002 CMP Media, LLC. All rts. reserv.

01212891 CMP ACCESSION NUMBER: NWC20000403S0019

**A Metalanguage For the Ages - HTML can make a Web document attractive, but XML lets you create a language that also gives meaning to every word in your document.**

Ahmad Abualsamid  
NETWORK COMPUTING, 2000, n 1106, PG69  
PUBLICATION DATE: 000403  
JOURNAL CODE: NWC LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Feature  
WORD COUNT: 2393

... then the sample document would be invalid. It would still be well-formed and available for viewing in a browser or storage in a database.

**XML** parsers also can be event-based, tree-based or both. An event-based parser sends ...the parser for the element's data. The event-based approach is highly effective when the application is interested in only a subset of the **elements** in a sequential fashion.

A **tree**-based **parser** looks at the **XML** document 's DTD and determines whether the document follows the rules by representing the document in a tree-like data structure. In the Burns and Allen...

...compiler's, which reads a program's source code, parses it and generates an intermediate, tree-like representation of the source code.

We examined leading **XML** parsers from IBM Corp., Microsoft Corp., Oracle Corp., Sun Microsystems and James Clark, an independent software developer who played a major part in developing the...

10/3,K/53 (Item 1 from file: 813)  
DIALOG(R)File 813:PR Newswire  
(c) 1999 PR Newswire Association Inc. All rts. reserv.

1294423 SFTH015  
**Wallop Build-IT Reduces Manual Administration of Web Site Updates Through Automation**

08:35 EDT WORD COUNT: 1,347

...share and re-use of templates and components with team members, and transparently take advantage of version control capabilities.

Wallop Build-IT 2.7 -- Using **XML** to Manage Relationships of Custom Languages and Tags

Wallop Build-IT already leads the industry in the breadth of languages and component types which it parses. Its sophisticated parsing engine parses **HTML**, Visual Basic Script, JavaScript, perl, Cascading Style Sheets, Server-Side Image Maps, Java and C++ source code, references to dynamically generated content within CGI scripts, Internet Database Connector (IDC) files, and Channel Definition Format (CDF) files. It parses these components to understand and dynamically manage the relationships among them, ensuring site integrity.

In version 2.7, Wallop Build-IT leverages the industry-standard **XML** specification as the basis for extending its relationship management capabilities. Wallop Build-IT's parsing modules -- which define what tags are parsed and what actions are taken -- are defined as **XML** data structures. Because this capability is based on an industry standard, Wallop Build-

10/3,K/54 (Item 1 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2002 Business Wire. All rts. reserv.

00300484 20000614166B1675 (USE FORMAT 7 FOR FULLTEXT)  
**First Call and B-Bop Unveil Jointly Created XML Specification for Financial Research**

Business Wire

Wednesday, June 14, 2000 09:44 EDT

JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

DOCUMENT TYPE: NEWSWIRE

WORD COUNT: 841

...a process that is open and democratic, accelerating the creation of a public standard that meets the requirements of the brokerage and asset management communities."

"**XML** is rapidly becoming the essential foundation for e-business information,"

said Sanjay Manchanda, CEO of B-Bop. "We strongly believe that it's important

for the industry to adopt a DTD standard in order to fully leverage the revolutionary benefits provided by **XML**. In turn, we expect that this will lead

to better product offerings. First Call's industry knowledge, and their ability to incorporate early input from...

...support the efforts of companies involved in the creation,



distribution and consumption of financial research to develop and adopt an industry standard."

A broadly accepted **XML** standard within the financial services industry will

ensure that the independent elements included in a research document (earnings

estimates, recommendations, analyses, etc.) are structured in a conformant manner across all organizations. This will facilitate the **parsing** of the research document into separate **components**. These components can then be

distributed to the appropriate end-user, either separately or in various combinations, allowing for truly customized information aimed at meeting the

unique needs of each recipient. **XML** documents can also be easily converted to

the format specified by recipients and delivered seamlessly over the Web and

to wireless devices and other applications.

B-Bop, The **XML** Platform Company(TM), is the leading provider of a standards-based **XML** platform for Web-based content management and e-business

information exchange applications. B-Bop's products and services enable businesses to transform, store, and repurpose...

13/9/10 (Item 3 frc file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2002 The Gale Group. All rts. reserv.

02492169 Supplier Number: 61929262 (THIS IS THE FULLTEXT)  
**The Connection Factory and Objectivity, Inc. To Provide Next-Generation XML Server.**

PR Newswire, pNA

May 8, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 506

TEXT:

Rotterdam-Based XML Leader and Objectivity Also Sign

Co-Marketing Letter of Understanding

MOUNTAIN VIEW, Calif., May 8 /PRNewswire/ --

Objectivity, Inc., the leading provider of distributed, scalable object databases, today announced that The Connection Factory of Rotterdam, the Netherlands, is using Objectivity/DB(R) for its cutting-edge XML database solution, known as Xhive. Additionally, the company announced that it has also entered into a worldwide co-marketing agreement with The Connection Factory.

The Connection Factory's Xhive XML database solution offers a revolutionary, new way to store, retrieve and query XML documents, or XML document fragments. Using Objectivity/DB, The Connection Factory has created an easy-to-use, fast, reliable, scalable database that conforms to the W3C XML standards. Core product features include: transaction model, caching, session pools, security, data and document versioning in addition to the W3C XML standards (DOM, XPath).

The Letter of Understanding (LOU) formalizes a co-marketing relationship where the two companies team on sales and marketing efforts, as well as share distribution channels worldwide as appropriate.

"We're pleased to welcome The Connection Factory to our rapidly increasing base of customers and partners," said David I. Caplan, president and CEO of Objectivity. "XML has become a critical issue in today's Internet applications. Xhive represents the latest generation of XML solutions made possible by Objectivity."

"The Connection Factory markets Xhive to companies and organizations that require storage and retrieval of XML-based information," said Jeroen van Rotterdam, president of The Connection Factory bv. "We selected Objectivity because of its worldwide presence, strong product capabilities and outstanding support network. We believe that Objectivity is the perfect database solution for XML."

Version 1.0 of Xhive will be released in the second quarter of 2000. There is an "early access program" for those companies and organizations interested in advance information about this product. For more information, please visit [www.xhive.com](http://www.xhive.com).

More About The Connection Factory and Xhive

The Connection Factory b.v. (TCF) is currently developing Xhive, a database for XML (Extensible Markup Language) documents. XML, a W3C standard, is the universal format for structured documents and data. Xhive offers storage of XML documents in an efficient, flexible, reliable and scalable manner.

TCF is privately held; one of TCF's current shareholders is Twinning (<http://www.twinning.nl>), a major Dutch venture capitalist. TCF is headquartered in Rotterdam, The Netherlands. Contact The Connection Factory by telephone at +31 10 4046870, by fax at +31 10 4046498 or by sending e-mail to [info@xhive.com](mailto:info@xhive.com).

More About Objectivity, Inc.

Objectivity, Inc. is the leading provider of distributed, scalable object databases with unrivaled support for mixed-language development and mixed-hardware environments. Objectivity boosts developer productivity, shortens time-to-market, and provides the ideal platform for mission-critical applications requiring continuous performance and adaptability to future technologies.

Objectivity, Inc. is headquartered in Mountain View, Calif., USA. For more information, contact the Company by sending e-mail to [info@objectivity.com](mailto:info@objectivity.com), visiting <http://www.objectivity.com> or calling

650-254-7100. Objectivity's European Operation may be contacted directly by telephone at 31.182.550.506 or by fax at 31.182.5123.62

COPYRIGHT 2000 Gale Group

COPYRIGHT 2000 PR Newswire Association, Inc.

PUBLISHER NAME: PR Newswire Association, Inc.

COMPANY NAMES: \*Objectivity Inc.

EVENT NAMES: \*610 (Contracts & orders received)

PRODUCT NAMES: \*7372400 (Applications Software)

INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)

SIC CODES: 7372 (Prepackaged software)

NAICS CODES: 51121 (Software Publishers)

13/3,K/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02396193 SUPPLIER NUMBER: 61953375 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**XHTML: A Bridge To The Future -- THE W3C'S RECOMMENDATION BLENDS XML AND  
HTML TO PRODUCE EXTENSIBLE WEB-PAGE FORMATTING.(Company Business and  
Marketing)**

Kiely, Don  
InformationWeek, 210  
May 8, 2000

ISSN: 8750-6874 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2009 LINE COUNT: 00165

... of a desktop PC, and browsers on them will be less tolerant of any  
malformed markup used to render a document. XHTML is designed to **make  
Web documents** accessible and interoperable across platforms, in **part**  
by enforcing a rigorous coding standard.

Modularity made it into the specification late in the process, and  
acknowledges the growing role that the Web is...

...will be modularization.

The semantics of XHTML elements and their attributes are defined by  
the current HTML 4.02 specification. XHTML 1.0 specifies three **XML**  
document types that correspond to the three HTML 4.02 DTDs: Strict,  
Transitional, and Frameset. These XHTML DTDs are more restrictive than HTML  
because XML...

13/3,K/2 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02395810 SUPPLIER NUMBER: 61950238 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**TACKLES INTEGRATION OF DATABASES, INTERNET -- IBM's new DB2 aims to help  
e-business players.(DB2 Universal Database 7.0)(Product Announcement)**

Kovar, Joseph F.  
Computer Reseller News, 58  
April 24, 2000

DOCUMENT TYPE: Product Announcement ISSN: 0893-8377 LANGUAGE:  
English RECORD TYPE: Fulltext  
WORD COUNT: 571 LINE COUNT: 00048

... database's indexes are retained in memory while the data is on disk  
to allow high-speed, text-based searches over the Internet, Harris said.

**XML** support also was enhanced, said Harris. DB2 can disassemble an  
imported **XML document** to put the **parts** into the database and export  
an **assembled XML document** from them. The database also can save tags  
such as date written, author and table of contents for searches, he said.

Version 7 also includes...

13/3,K/3 (Item 3 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02347581 SUPPLIER NUMBER: 57436448 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**New language to sidestep e-com directory woes.(Directory Services Markup  
Language)(Company Business and Marketing)**

Berinato, Scott; Kerstetter, Jim  
PC Week, 1  
Nov 8, 1999

ISSN: 0740-1604 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 745 LINE COUNT: 00063

... 2.0 Marketplace Edition for the service provider market. Pricing  
has not been set for that release.

Despite its promise, DSML faces challenges similar to **XML** 's.

Developers that have tried to use **XML** to cure interoperability woes in other fields, such as electronic data transfer, have struggled with maintaining similar DTDs (Document Type Definitions) when applying **XML** to applications. DTDs are used to tag **XML documents**, and if a vertical market segment creates its own DTDs, it can disrupt data exchange.

Jamie Lewis, an analyst with The Burton Group, in Atlanta, is withholding judgment until he sees a...

13/3,K/4 (Item 4 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02263081 SUPPLIER NUMBER: 53624977 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**2Bridge Wades into Enterprise Publishing. (2Bridge Software's 2Share Server intranet/workflow software) (Product Information)**

McKenzie, Matthew S.

Seybold Report on Internet Publishing, 3, 5, NA(1)

Jan, 1999

ISSN: 1090-4808 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 2463 LINE COUNT: 00198

... s tight integration with the LiveWire environment. Beginning with version 2.0, 2Share can now run as a distributed application on multiple servers and databases.

**XML** support. While 2Bridge advertises support for **XML**, what it does is still pretty limited. Right now, users have the option to publish **XML**-formatted metadata, allowing Internet or extranet users with **XML**-enabled web browsers to search content on the system. Though it does not yet have functions that take advantage of **XML** tags inside documents, 2Share's ability to export metadata in **XML** could provide the basis for creating a syndication server in the future. Already there are segments of the market making use of SGML or **XML** headers to accompany documents in HTML, PDF or other formats, and we expect that trend to grow as various industries become more comfortable with server-to-server publishing for...

13/3,K/5 (Item 5 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02248145 SUPPLIER NUMBER: 53333487 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Office 2000 Preview. (Microsoft business application suite) (Software Review) (Evaluation)**

Mendelson, Edward

PC Magazine, 41(1)

Jan 5, 1999

DOCUMENT TYPE: Evaluation ISSN: 0888-8507 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 3333 LINE COUNT: 00264

... and Word formats. Documents can be previewed in your browser during editing, even if that browser is Netscape Navigator. When a document is stored in **HTML format**, document summaries and other items not part of standard HTML are stored in **Extensible Markup Language (XML)** tags to make them available when the document is reopened in Office.

There's a serious pitfall in this dual support for HTML and standard ...

13/3,K/6 (Item 6 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02110165 SUPPLIER NUMBER: 19890511

**XML offers standard way of extending HTML. (Extensible Markup Language) (Internet/Web/Online Service Information)**

Kiely, Don

InformationWeek, n652, pA(3)

Oct 13, 1997

ISSN: 8750-6874

LANGUAGE: English

RECORD TYPE: Abstract

**ABSTRACT:** The **Extensible Markup Language ( XML )** is a subset of SGML, the forefather of meta languages used to create electronic documents. **XML** can be used to develop markup languages. **XML**, according to the WC3 draft specification, describes a class of data objects called **XML** documents that can be utilized to develop an object-oriented version of the Web. **XML** is a data standard with a self-describing schema. With the language, applications can easily transfer information by using a single, common **format**. **XML** documents consists of three **parts**: a Document Type Declaration defining its structure, a document with the data and markup tags, and style sheets for formatting. WC3's **XML** specification defines several design goals, including SGML compatibility and application support.

13/3,K/7 (Item 1 from file: 47)

DIALOG(R)File 47:Gale Group Magazine DB(TM)

(c) 2002 The Gale group. All rts. reserv.

05230000 SUPPLIER NUMBER: 21148279 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Bridging the gap between SGML and HTML: the potential of XML for technical communicators. (eXtensible Markup Language) (Technology Reviews) (Column)**

Ray, Deborah S.; Ray, Eric J.

Technical Communication, v45, n3, p427(6)

August, 1998

DOCUMENT TYPE: Column ISSN: 0049-3155 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 4464 LINE COUNT: 00358

What's key for technical communicators is that **XML** provides a tool that lets you use skills you already have. For example, as technical communicators, you've spent incredible amounts of time honing and developing professional skills, including interviewing, information presentation, and audience analysis, just to name a few. The technical **part** of **XML** - knowing how to **create XML documents** - is an easily learned skill. Using **XML**, however, requires more than coding skills; it requires applying the information development and information design skills that are the hallmark of effective technical communicators. So, essentially, using **XML** gives you the opportunity to maximize and apply skills you've already mastered.

With HTML, SGML, and many other markup languages previously available, you might wonder why technical communicators or anyone else needs another one. As you'll see in the following sections, **XML** fills a technological void between SGML and HTML, compensating for the limitations of each. In particular, it addresses key issues that allow you to meet...

13/3,K/8 (Item 1 from file: 621)

DIALOG(R)File 621:Gale Group New Prod. Annou. (R)

(c) 2002 The Gale Group. All rts. reserv.

02737679 Supplier Number: 67454442 (USE FORMAT 7 FOR FULLTEXT)

**SoftQuad to Acquire ADEi, a Leading Provider of XML Content Transformation Solutions.**

PR Newswire, pNA

Nov 16, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 1475

... Communications, B2B e-commerce transactions are expected to reach \$6.3 trillion by 2005. By 2004, 40% of all B2B traffic will pass through an **XML** server, which is expected to generate over \$600 billion in revenues, according to Zona Research.

SoftQuad's award-winning XMetaL(R), the premier **XML** content authoring solution in use by over 2000 customers, enables everyone in an

organization to create original XML content for shared use. The ability to convert existing content directly into XML is a fundamental requirement for companies as they migrate their enterprise content infrastructures to XML. With the ability to transform large volumes of existing documents in formats such as Word, Quark, Pagemaker and Acrobat (PDF), ADEi's systems solve the content transformation challenges that many organizations face. Additionally, ADEi's XML -it Document Markup System, now part of the SoftQuad content services offering, provides an easy way to transition existing Word content into XML. This gives customers total control over their migration to an XML content infrastructure. "We are pleased to be joining forces with SoftQuad, the recognized leader of XML technology," stated Rick Russell, President of ADEi. "Together, we will be able to respond to the growing needs of Global 2000 companies and their suppliers to quickly create XML content and convert existing content into XML."

XML Expertise, Key Customer Additions and Enhanced Market Presence  
ADEi's management team and engineering staff are all expected to join SoftQuad. Combined, ADEi's team...

13/3,K/9 (Item 2 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2002 The Gale Group. All rts. reserv.

02645077 Supplier Number: 65253528 (USE FORMAT 7 FOR FULLTEXT)  
**Continental Airlines Takes Off With SoftQuad's XMetaL; XML Content Creation with XMetaL Improves the Efficiency of Continental's Technical Publications Department.**  
Business Wire, p2619  
Sept 14, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 1280

TORONTO--(BUSINESS WIRE)--Sept. 14, 2000

SoftQuad Software, Ltd. (OTCBB:XML), an internationally recognized developer of XML -enabling technologies, today announced that Continental Airlines (NYSE:CAL)(NYSE:CAL.A) has been able to quickly adopt XML in its technical publications department with the help of XMetaL, SoftQuad's award winning XML content creation solution.

Continental is using XMetaL integrated with Documentum's (Nasdaq:DCTM) 4i content management platform to edit and manage the content and lifecycle of their aircraft maintenance manuals, internal maintenance procedures, illustrated parts catalogues, and maintenance training documents. XML is an ideal document format for the airline industry because it allows companies to manage and digitally deliver the thousands of pages of mission critical technical documentation and maintenance manuals that must regularly be produced and revised.

Continental's quick transition to XML has dramatically shown that XMetaL can be easily customized and integrated into a content management system to allow people with no prior experience in either XML or structured content to quickly create valid XML content.

"One of the barriers to the wide-scale adoption of XML has been the difficulty engineers and technical writers have had working with the format," said Roberto Drassinower, president and CEO of SoftQuad Software, Ltd. "As...

13/3,K/10 (Item 3 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2002 The Gale Group. All rts. reserv.

02492169 Supplier Number: 61929262 (USE FORMAT 7 FOR FULLTEXT)  
**The Connection Factory and Objectivity, Inc. To Provide Next-Generation XML Server.**  
PR Newswire, pNA  
May 8, 2000  
Language: English Record Type: Fulltext

Document Type: Newswire, Trade  
Word Count: 506

... provider of distributed, scalable object databases, today announced that The Connection Factory of Rotterdam, the Netherlands, is using Objectivity/DB(R) for its cutting-edge XML database solution, known as Xhive. Additionally, the company announced that it has also entered into a worldwide co-marketing agreement with The Connection Factory.

The Connection Factory's Xhive XML database solution offers a revolutionary, new way to store, retrieve and query XML documents , or XML document fragments . Using Objectivity/DB, The Connection Factory has created an easy-to-use, fast, reliable, scalable database that conforms to the W3C XML standards. Core product features include: transaction model, caching, session pools, security, data and document versioning in addition to the W3C XML standards (DOM, XPath).

The Letter of Understanding (LOU) formalizes a co-marketing relationship where the two companies team on sales and marketing efforts, as well...

...re pleased to welcome The Connection Factory to our rapidly increasing base of customers and partners," said David I. Caplan, president and CEO of Objectivity. " XML has become a critical issue in today's Internet applications. Xhive represents the latest generation of XML solutions made possible by Objectivity."

"The Connection Factory...

13/3,K/11 (Item 4 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2002 The Gale Group. All rts. reserv.

01708945 Supplier Number: 50316957 (USE FORMAT 7 FOR FULLTEXT)  
**Siemens Develops Multimedia Documentation System for Easily Generating and Updating Product Manuals for Large Industrial Systems**  
PR Newswire, p915NYTU098  
Sept 15, 1998  
Language: English Record Type: Fulltext  
Article Type: Article  
Document Type: Newswire; Trade  
Word Count: 732

... files or desktop publishing programs such as Microsoft Word, Interleaf, or FrameMaker. Since MMDOC converts the information into platform-independent, application-independent standards, such as XML , SGML, or HTML, the documents can be viewed over the web.

By extracting key "Anchorable Information Units" (AIUs), the program allows the user to relate...

...For instance, a user can click on a picture of a part and immediately access its maintenance history, a training video, design specifications, or a part ordering form .

Based on product data, the HTML / SGML / XML documents and AIU files can then be automatically configured into different types of product manuals from document databases, and automatically hyperlinked for production, service and training-related applications. At...

13/3,K/12 (Item 5 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2002 The Gale Group. All rts. reserv.

01708123 Supplier Number: 50301956 (USE FORMAT 7 FOR FULLTEXT)  
**JetForm Raises The Bar With Powerful New Solution For Web-Based Workflow**  
PR Newswire, p914NYM008  
Sept 14, 1998  
Language: English Record Type: Fulltext  
Article Type: Article  
Document Type: Newswire; Trade



Word Count: 861

... and ad hoc,  
knowledge-driven processes.

-- Open architecture workflow forms -- FormFlow 99 leverages an open architecture, based on COM/DCOM (JavaBeans will follow soon) and XML ,  
that provides high-value functionality - such as digital signatures, high-fidelity printing, and Web-to-database support -- while still seamlessly integrating with other business applications and work environments. FormFlow 99 is the only XML -based forms solution on the market. InTempo's client-independence also means open support for third party forms , such as HTML documents .  
-- High security -- JetForm is the only solution that delivers the security enterprises need for workflow. Features include digital signature support (both using Entrust technology and...

13/3,K/13 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

08063253 Supplier Number: 67164165 (USE FORMAT 7 FOR FULLTEXT)  
**SoftQuad Software Ltd.(Brief Article)**  
Air Transport World, v37, n11, p124  
Nov, 2000  
Language: English Record Type: Fulltext  
Article Type: Brief Article  
Document Type: Magazine/Journal; Trade  
Word Count: 136

... with Documentum's 4i content management platform to edit and manage the content and life cycle of its aircraft maintenance manuals, internal maintenance procedures, illustrated parts catalogs and maintenance training documents. XML is an ideal document format for the airline industry because it allows companies to manage and digitally deliver the thousands of pages of mission critical technical documentation and maintenance manuals that must regularly be produced and revised.

With the adoption of XML and XMetaL, Continental improved the efficiency of its technical publications department, allowing writers to concentrate on content rather than formatting, SoftQuad says.

13/3,K/14 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

07846576 Supplier Number: 64990370 (USE FORMAT 7 FOR FULLTEXT)  
**X12 seeks supporting role in XML standards setting : New committee chair wants to avoid 'hodgepodge' approach that slowed EDI adoption.**  
Kilbane, Doris  
Frontline Solutions, v1, n9, p13  
August, 2000  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Professional  
Word Count: 482

... to have one global infrastructure. We are looking to see what role we can play to make that successful."

Finding a place

The niche for **XML**, said Barkley, will be to enable a company's smaller clients to electronically exchange data. "**XML** is an additional tool for electronic exchange.

"I want to layer **XML** onto the EDI structure," he added. Part of that involves making sure ASC X12 understands the underlying data needed for business exchange. This includes business processes, modeling and communication data dictionaries.

Barkley said successful e-business...

...it accurately identifies the data needed to perform various business functions.

An organization like X12 should act as a North America-centered group that feeds **XML** tag recommendations to a larger body, Barkley said. "The doors are open to new ways of doing business--both electronically and organization to organization."

13/3,K/15 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

06582055 Supplier Number: 55528397 (USE FORMAT 7 FOR FULLTEXT)  
**BizTalk Could Spur XML And E-Business -- Microsoft Makes Big Investment In Latest XML Framework. (Product Information)**  
Kiely, Don  
InformationWeek, p74  
August 23, 1999  
Language: English Record Type: Fulltext Abstract  
Document Type: Magazine/Journal; Tabloid; General Trade  
Word Count: 1547

... is usable with any transport mechanism and containing information about the application where the data is heading. It provides application-independent routing information for transferring **XML** documents.

The mandatory and optional tags identify an **XML** document as part of the BizTalk framework. However, the real benefit of **XML** will be realized when groups get together and define schemas that describe the format of data for particular uses.

Part of the **XML** specification is document type definitions, which, like **XML**, are derived from the Standard Generalized Markup Language. DTDs describe the data structure and give identifying names to their contents.

But BizTalk is based on the proposed **XML**-Data specification, which goes beyond DTDs. It describes data types and supports the **XML** namespaces specification. **XML**-Data was proposed by Microsoft and some of its partners, and it is by no means certain to become a standard. But some kind of data specification for **XML** is likely to be adopted by the W3C, and Microsoft

13/3,K/16 (Item 4 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

06120499 Supplier Number: 53736178 (USE FORMAT 7 FOR FULLTEXT)  
**Extensible Markup Language Is Seen As A Universal Object Model That Will Enhance Web Development And Simplify Application Integration -- XML: More Than Just A Quick Fix. (Technology Information)**  
Kiely, Don  
InformationWeek, p77(1)  
Feb 8, 1999  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Tabloid; General Trade  
Word Count: 2146

... does for HTML code, XSL does for XML, plus a lot more. XSL acts as almost a full processing language for the data contained within **XML**

pages. It provides simple Select Case statements (xsl:choose), a programmatic construct that executes codes based on a specific condition. It also supports conditional branching...

...each), which repeats blocks of code as long as a particular condition is true.

There are two parts to the XSL specification, one for transforming XML documents and another for formatting semantics. Transforming XML documents involves associating patterns with the source tree contained within the XML document, using XSL templates. This is the XSL feature that provides almost complete flexibility to convert data into any format, including an HTML - formatted Web page.

The other part of the XSL spec is used to provide formatting objects with attributes you can set for flexible formatting. XSL's formatting objects work much the...

...object or the formatting of a numbered list with the list flow object. Each object has a number of properties for fine-tuning the formatting.

XML and XSL together can provide what amounts to a customizable HTML. This lets Web designers define their own tags, rather than rely on Microsoft and...

13/3,K/17 (Item 5 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

05283663 Supplier Number: 48047413 (USE FORMAT 7 FOR FULLTEXT)  
XML Offers Standard Way Of Extending HTML -- Extensible Markup Language  
defines a class of data object for Web documents

Kiely, Don  
InformationWeek, p8A  
Oct 13, 1997  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Tabloid; General Trade  
Word Count: 2387

... The number of optional features in XML will be kept to the absolute minimum, ideally zero;

- XML documents should be legible and reasonably clear;
- The XML design should be prepared quickly;
- The design of XML shall be formal and concise;
- XML documents shall be easy to create;
- Terseness in XML markup is of minimal importance.

These goals keep things as simple as possible and keep XML focused on use with the Web. At its heart, XML is a data standard with a self-describing schema of any arbitrary depth and complexity. With such a standard, applications can easily transfer data by using a single, common format. This was the original purpose of SGML before it ballooned with all its rarely used extensions.

#### Three- Part Harmony

An XML document in its most well- formed and valid state consists of three parts: a document with the data and markup tags, a Document Type Declaration (DTD) defining its structure, and style...

...the first, a document with data and markup tags, is required, but the inclusion of DTDs and style sheets unleashes the full benefit of the XML standard.

The example on page 8A shows how XML might look to mark up the content of an E-mail message, an instance of an XML document. Note how the <email> tag defines an E-mail element that contains other delineated pieces of information such as a head, address information, and...

13/3,K/18 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2002 The Gale Group. All rts. reserv.

12426896 SUPPLIER NUMBER: 63772581 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Hardcopy.**

Wiley, Deborah Lynne

EContent, 23, 4, 93

August, 2000

ISSN: 1525-2531 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1519 LINE COUNT: 00119

... at the Que book site.

The book assumes you have a working knowledge of ASP and Visual Basic to use the HTML-to-XHTML-to-XML conversion process. The files are again available in various places online, and you can download the completed pages to skip this part.

The final result of the process is a database of XML tagged document portions to load onto a Web server and create dynamic content. The explanations and writing in the book are very clear, but the whole thing makes the most sense if you actually take the...

...fair bit of time, and a desire to get your hands dirty, this is the book for you. Others should steer clear.

\*\*\*\*

The ABCs of XML

by Norman Desmarais

ISBN: ISBN: 0-9675942-0-0; softcover

Published: 2000

Pages: 206

Price: \$28

Available from: New Technology Press, P.O. Box 842411...

13/3,K/19 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2002 The Gale Group. All rts. reserv.

11530016 SUPPLIER NUMBER: 57795667 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Quark reveals pending release of a new print-to-Web Xtension. (Advanced**

**Digital Technologies) (includes a commentary on the release of the new software) (Quark Inc.'s Avenue.quark software)**

Graphic Arts Monthly, 71, 10, 138(2)

Oct, 1999

ISSN: 1047-9325 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1438 LINE COUNT: 00119

... documents can be manually mapped to other elements, and new content can be added. When finished, the user saves the file, thereby storing it in XML format. Tagging the rest of the documents is handled in the same fashion.

CONTENT, NOT PRESENTATION

According to Quark officials, Avenue.quark separates content from presentation. When the program is used to move QuarkXPress content into XML format, structure is imposed on the various parts of that content. A variety of methods then can be used to automatically format the content based on its meaning rather than manually formatting it...

...place and in more than one way, without requiring the user to make multiple copies of it. For example, the user can serve the same XML content in two different Web sites with completely different appearances.

Avenue.quark also can be integrated with existing Web systems, including Web application servers.

In...

13/3,K/20 (Item 3 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2002 The Gale Group. All rts. reserv.

11056788 SUPPLIER NUMBER: 54636934 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**THE XML files. (computer language)**

Hoffman, Charles; Kurt, Christopher; Koreto, Richard J.

Journal of Accountancy, 187, 5, 71(1)

May, 1999

ISSN: 0021-8448

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 5073

LINE COUNT: 00421

... your accounting software vendor. Customers drive vendor requirements; if end-users start asking, vendors will deliver. This evolution of capabilities appears inevitable.

Another example of **XML** in use is the Open Applications Group, a nonprofit industry consortium that includes the world's leading business software companies. Among its members are IBM, PricewaterhouseCoopers, Oracle, Great Plains, PeopleSoft, QAD and SAP. This group has developed approximately 100 **XML** document type definitions (DTDs)--the lists of codes in **XML** that define the data in business transactions. (A DTD may list that every customer name will be coded, or tagged, <CUSTNAME>. It may further mandate that <CUSTNAME> will be subordinate to--nested within--a tag called <PURCHASE> that will indicate it's a name that's **part** of a purchase order. (See " **XML** : Behind the Scenes," **page** 75.)) This **organization** is working to make business application integration easy and reliable, while reducing costs and implementation time. Does your accounting system conform to this integration specification...

...ask your accounting software vendor.

If you use products such as PointCast or information channels through your Web browser, you are using information structured in **XML** . Specialized channels provide information targeted for specific vertical industries. For example, PricewaterhouseCoopers publishes news updates for the Internet and telecommunications industry through PointCast. These channels...

13/3,K/21 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2002 ProQuest Info&Learning. All rts. reserv.

02053086 57658796

**XML Web Documents from Scratch**

Wiley, Deborah Lynne

Econtent v23n4 PP: 94 Aug/Sep 2000

ISSN: 1525-2531 JRNL CODE: DTB

WORD COUNT: 268

...TEXT: sometimes at the Que book site.

The book assumes you have a working knowledge of ASP and Visual Basic to use the HTML-to-XHTMLto- **XML** conversion process. The files are again available in various places online, and you can download the completed pages to skip this part.

The final result of the process is a database of **XML** tagged **document portions** to load onto a Web server and **create** dynamic content. The explanations and writing in the book are very clear, but the whole thing makes the most sense if you actually take the...

13/3,K/22 (Item 2 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2002 ProQuest Info&Learning. All rts. reserv.

01877263 05-28255

**BizTalk could spur XML and e-business**

Kiely, Don

Informationweek n749 PP: 74-76 Aug 23, 1999

ISSN: 8750-6874 JRNL CODE: IWK

WORD COUNT: 1541

...TEXT: is usable with any transport mechanism and containing information

about the application where the data is heading. It provides application-independent routing information for transferring XML documents.

The mandatory and optional tags identify an XML document as part of the BizTalk framework. However, the real benefit of XML will be realized when groups get together and define schemas that describe the format of data for particular uses.

Part of the XML specification is document type definitions, which, like XML, are derived from the Standard Generalized Markup Language. DTDs describe the data structure and give identifying names to their contents. But BizTalk is based on the proposed XML-Data specification, which goes beyond DTDs. It describes data types and supports the XML namespaces specification. XMLData was proposed by Microsoft and some of its partners, and it is by no means certain to become a standard. But some kind of data specification for XML is likely to be adopted by the W3C, and Microsoft has pledged to support the final specification.

Automated Validation

All of the work developing a...

13/3,K/23 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01756642 04-07633

**The write stuff!**

Weinberger, David

Inform v13n1 PP: 38 Jan 1999

ISSN: 0892-3876 JRNL CODE: IFN

WORD COUNT: 590

...TEXT: not only be able to move our word processed documents onto the Web easily, but will be able to make smarter Web pages (thanks to XML) that work with applications that can understand XML.

While Microsoft's support of XML seems like a "done deal," how it chooses to implement that support will be crucial. For example, if it's difficult to mark up a Word document with content-specific XML tags, then it will be hard to get the smarter document benefits of XML. Similarly, if the Word "document-type definition" - the set of tags and rules for a particular type of document - is very complex, it will be difficult for third party applications to make sense of Word XML documents.

At the very least, though, it seems quite likely that XML will serve as a common format that will begin to heal the unnatural rift between office and Web documents. And that's important because as...

13/3,K/24 (Item 4 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01523668 01-74656

**XML offers standard way of extending HTML**

Kiely, Don

Informationweek n652 PP: 8A-12A Oct 13, 1997

ISSN: 8750-6874 JRNL CODE: IWK

WORD COUNT: 1949

...TEXT: The number of optional features in IL will be kept to the absolute minimum, ideally zero;

XML documents should be legible and reasonably clear; The XML design should be prepared quickly; The design of XML shall be formal and

concise;

**XML** documents shall be easy to create;

Terseness in **XML** markup is of minimal importance.

These goals keep things as simple as possible and keep **XML** focused on use with the Web. At its heart, **XML** is a data standard with a selfdescribing schema of any arbitrary Application Development depth and complexity. With such a standard, applications can easily transfer data by using a single, common format. This was the original purpose of SGML before it ballooned with all its rarely used extensions. Three- Part Harmony An **XML** document in its most well- formed and valid state consists of three parts: a document with the data and markup tags, a Document Type Declaration (DTD) defining its structure, and style...

... the first, a document with data and markup tags, is required, but the inclusion of DTDs and style sheets unleashes the full benefit of the **XML** standard.

The example on page 8A shows how **XML** might look to mark up the content of an E-mail message, an instance of an **XML** document. Note how the <email> tag defines an E-mail element that contains other delineated pieces of information such as a head, address information, and...

13/3,K/25 (Item 1 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2002 Resp. DB Svcs. All rts. reserv.

02780130 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**TACKLES INTEGRATION OF DATABASES, INTERNET -- IBM's new DB2 aims to help e-business players**  
(Latest version of IBM's DB2 Universal Database was designed to help customers accelerate move to e-business world while improving scalability, availability and reliability)  
Computer Reseller News, p 58  
April 24, 2000  
DOCUMENT TYPE: Journal ISSN: 0893-8377 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 531

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...database's indexes are retained in memory while the data is on disk to allow high-speed, text-based searches over the Internet, Harris said.

**XML** support also was enhanced, said Harris. DB2 can disassemble an imported **XML** document to put the parts into the database and export an assembled **XML** document from them. The database also can save tags such as date written, author and table of contents for searches, he said.

Version 7 also includes...

13/3,K/26 (Item 2 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2002 Resp. DB Svcs. All rts. reserv.

02635767 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Chapel Hill, N.C., Software Firm Rides Latest Online-Technology Wave**  
(Extensibility (Chapel Hill, NC) to receive \$3 mil investment from Intersouth Partners (Morrisville))  
News & Observer (The) , p N/A  
November 10, 1999  
DOCUMENT TYPE: Regional Newspaper (United States)  
LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 760

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...If they decide to purchase the software, they pay \$99.95.

Extensibility is also busy joining forces with some of the bigger players in the **XML** market.

Walnut Creek, Calif.-based Commerce One last week announced its new **XML** schema tool kit, which will be supported by Extensibility's **XML** Authority. Commerce One's stock skyrocketed after the company announced that General Motors would use its software to create an Internet marketplace for auto parts.

Extensibility also enjoys a cozy relationship with Microsoft, which recommends **XML** Authority for use with its BizTalk **XML** schema dialect. And this week, Extensibility announced that the big-five accounting firm PriceWaterhouseCoopers will use **XML** Authority as **part** of the **XML** **structure** it **builds** for customers.

With McLean, Va.-based OneSoft, another e-commerce company, Extensibility is developing a way users can develop meta-schemas that further customize the use of **XML** Authority.

There are more partnerships to come, according to Conrad, who described Extensibility as the "Switzerland" of **XML** technology because it will be able to work with many different **XML** schema languages.

"It's all about heterogeneous access to technology with **XML** ," Conrad said.

And the more partners that Extensibility gains, the more users turn to **XML** Authority. And when those users start trying to do business with others, still more new users are referred to XML Authority. It's known as...

13/3,K/27 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2002 CMP Media, LLC. All rts. reserv.

01215262 CMP ACCESSION NUMBER: IWK20000508S0072  
**XHTML: A Bridge To The Future - THE W3C'S RECOMMENDATION BLENDS XML AND  
HTML TO PRODUCE EXTENSIBLE WEB-PAGE FORMATTING**  
DON KIELY  
INFORMATIONWEEK, 2000, n 785, PG210  
PUBLICATION DATE: 000508  
JOURNAL CODE: IWK LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Application Development ,  
WORD COUNT: 1903

... of a desktop PC, and browsers on them will be less tolerant of any malformed markup used to render a document. XHTML is designed to **make Web documents** accessible and interoperable across platforms, in **part** by enforcing a rigorous coding standard.

Modularity made it into the specification late in the process, and acknowledges the growing role that the Web is...

...will be modularization.

The semantics of XHTML elements and their attributes are defined by the current HTML 4.02 specification. XHTML 1.0 specifies three **XML** document types that correspond to the three HTML 4.02 DTDs: Strict, Transitional, and Frameset. These XHTML DTDs are more restrictive than HTML because XML...



13/3,K/28 (Item 2 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2002 CMP Media, LLC. All rts. reserv.

01214000 CMP ACCESSION NUMBER: CRN20000424S0043  
**TACKLES INTEGRATION OF DATABASES, INTERNET - IBM's new DB2 aims to help e-business players**  
Joseph F. Kovar  
COMPUTER RESELLER NEWS, 2000, n 891, PG58  
PUBLICATION DATE: 000424  
JOURNAL CODE: CRN LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Enterprise  
WORD COUNT: 537

... database's indexes are retained in memory while the data is on disk to allow high -speed, text-based searches over the Internet, Harris said.

XML support also was enhanced, said Harris. DB2 can disassemble an imported XML document to put the parts into the database and export an assembled XML document from them. The database also can save tags such as date written, author and table of contents for searches, he said.

Version 7 also includes...

13/3,K/29 (Item 1 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2002 Business Wire. All rts. reserv.

00106676 19990921264B1098 (USE FORMAT 7 FOR FULLTEXT)  
**XML.org Publishes OAGIS XML DTDs for Business Object Documents; OASIS Forms Relationship with Open Applications Group, Inc.**  
Business Wire  
Tuesday, September 21, 1999 08:19 EDT  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 640

TEXT:

...Organization for the Advancement of Structured Information Standards, today announced that it has formed a strategic relationship with the Open Applications Group, Inc. (OAGI).

As part of the agreement, OASIS will make the OAGI XML Business Object

Documents available on XML .org, the open, vendor-neutral industry portal hosted by OASIS. Further, the two organizations have agreed to exchange sponsor-level memberships, enabling each to contribute...

16/3,K/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02552239 SUPPLIER NUMBER: 79746981 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**XML codes data for net connection.**  
Gordon, Charles  
Electronic Engineering Times, 94  
Nov 5, 2001  
ISSN: 0192-1541 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 1373 LINE COUNT: 00106

... The parser and its application can thus process data records in formats that were developed after the application was written.

The technique is useful for **XML** Web browsers. But most other applications must be written so that the application code knows what the data inside a record represents and what to...

...into a schema compiler and a data record parser and generator. The schema compiler parses the schemas into a set of data structures and C **structure** definitions. The **parser** is used **at run-time** as part of the application firmware.

---

For the expanded online version of this article and code examples, go to eet.com/in...

16/3,K/2 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02089991 SUPPLIER NUMBER: 19643210 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**A technical overview of Web technologies. (includes related article on several differences between PATHWORKS and Windows NT network operating systems) (Internet/Web/Online Service Information)**  
Mione, Tony  
Digital Systems Report, v19, n2, p19(6)  
Summer, 1997  
ISSN: 1086-9638 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 3217 LINE COUNT: 00253

... machine, then Java, Javascript, VB Script, or another client-side technology is a better choice.

There are a number of libraries available to help you **parse** CGI variables and generate Web **pages** **on the fly**. One of the better libraries I have seen is CGI.pm. It requires Perl5. CGI.pm allows you to create an object and then use methods to emit **HTML** code for the appropriate FORM components. Before the variables are shipped to a CGI script, the names and values are "URL-encoded." This means that...

16/3,K/3 (Item 3 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01700343 SUPPLIER NUMBER: 16210466 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Seybold Paris, Part I: Electronic Publishing, Quark update. (includes related articles on The Type Lab and the Online Digital Integrated System for Information)**  
Seybold Report on Publishing Systems, v23, n19, p3(13)  
July 4, 1994  
ISSN: 0736-7260 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 10819 LINE COUNT: 00828

... declaration files at the start of valid sgml documents. It assumes the reference concrete syntax. In short, it is a tool for creating and editing **sgml** documents, but not one that is guaranteed to work with all dtDs.

Nice ships two dtds with the product that it guarantees will work with Tag Wizard-one for **html** , the other the ISO book dtd. Van Herwijnen says he has tested Tag Wizard successfully with other dtds, including the AAP book and article dtds...

...from a customer-support standpoint he is not yet able to officially support other dtds.

During editing, Tag Wizard parses only as much of the **document** as necessary in order to determine the hierarchy. A full **parse** of the entire **file** can be initiated at any **time** by pushing the **parse** button.

**Files** can be saved in Word's binary format, which is a distinct plus during the editing cycle. Once you are ready to produce **sgml** , the Export button takes care of removing the formatting and producing a valid **sgml** file.

Formatting. Tag Wizard lets you style a Word document using the full facilities of Word. To automate the process, the Tag Wizard format button  
...

16/3,K/4 (Item 4 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01630083 SUPPLIER NUMBER: 14770171 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Documentum: open approach to automating workflow and management of long documents. (client/server document management software) (includes related corporate profile) (Software Review) (Evaluation)**  
Walter, Mark  
Seybold Report on Publishing Systems, v23, n7, p3(11)  
Dec 1, 1993  
ISSN: 0736-7260 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 11693 LINE COUNT: 00908

... database. Sometimes, this is an advantage, as when a company wants archived material to remain in its native data format. In other cases, though, particularly **sgml** -based editorial systems for large reference works, storing pieces directly in a database can be advantageous. Documentum recently added this function to its content manager (in release 1.1, which is in the field), so that content can be stored directly in Oracle.

What Documentum lacks at this time is a predefined interface to an editing tool, **sgml** **parser** or **document "shredder"** that could take a tagged file and shred it into paragraph-level components that get stored individually in the database. In a typical Documentum...  
...fragments or chunks are never smaller than a physical file. After releasing its 1.1 server software, Documentum expects to build some form of standard **sgml** support in 1994.

3. Documents are the database. The third approach, one that is intended just for large documents in a multiauthor setting, is to treat the document as a database. AIS's **SGML** -DB is the first commercial product to take this controversial approach. It treats each element of the document as its own unique chunk of information...

16/3,K/5 (Item 5 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01508303 SUPPLIER NUMBER: 12013946 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Seybold Seminars and Imprinta '92, part 1: RIPs and recorders. (reviews of and key trends at the Feb 18-21, 1992, Seybold Seminars in Boston, MA, and the Feb 19-25, 1992, Imprinta prepress equipment exhibition in Dusseldorf, Germany; raster-image processors and recorders introduced or on display are described company-by-company; trapping and PostScript viewers are discussed)**  
Seybold Report on Publishing Systems, v21, n12, p10(27)  
March 16, 1992  
ISSN: 0736-7260 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 22176 LINE COUNT: 01712

... ROM application.

The WorldView Press also does these same things. In addition, though, it converts foreign files into Interleaf format. If the file is in **SGML** or a word processor format for which Interleaf 5 has a filter (WordPerfect, Microsoft Word, WordStar), the Press converts those files to Interleaf format, formats...

...CCITT Group 4 fax, or CGM formats.

After conversion, the document is ready for the indexing to be run. Manual hypertext links may be added at this time.

If the document is in PostScript format, the Press first **parses** the file and then indexes the text. Because PostScript has no notion of document structure, text may be anywhere within the page, including inside of...

16/3,K/6 (Item 1 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2002 The Gale Group. All rts. reserv.

02276887 Supplier Number: 58526503 (USE FORMAT 7 FOR FULLTEXT)

**IT FACTORY to Acquire Corporate Image Software, Bringing Advanced**

**E-Business Functionality into ITF Solution Environment.**

Business Wire, pl129

Jan 11, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 1236

... Accelerator.

E-Business Extensions

Corporate Image Software also provides a solution called E-Business Extensions(TM), a component for Domino developers to easily add advanced **XML**, networking and data tabulation capabilities to their Notes/Domino applications. E-Business Extensions enables capabilities such as **real - time** connections with other web servers, **parsing** and generating **XML documents**, and facilitating dynamic queries of Notes data from Web clients.

IT FACTORY will make the Corporate Image Software components available to its worldwide channel of...

...than 200 highly qualified business partners. IT FACTORY business partners from around the world can now easily integrate state-of-the-art payment processing and **XML** parsing and tabulation functionality into their Notes applications, and are assured of 100 percent interoperability with any Notes application built on the ITF architecture.

An...

16/3,K/7 (Item 2 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2002 The Gale Group. All rts. reserv.

02211781 Supplier Number: 56902552 (USE FORMAT 7 FOR FULLTEXT)

**IT FACTORY and Corporate Image Software Team to Bring Advanced E-Business Functionality into ITF Architecture.**

Business Wire, pl796

Oct 26, 1999

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 929

... to demonstrate Commerce Accelerator - including its support for SET - integrated with the ITF Software Development Kit and ITF e-commerce module.

Enabling capabilities such as **real - time** connections with other web servers, **parsing** and generating **XML documents**, and facilitating

dynamic queries of Notes data from web clients, E-Busine. . Extensions gives LotusScript developers with a powerful toolbox of advanced e-commerce functionality...

...Extensions provides:

- the URL Connection class library that enables Notes applications to connect to other web servers and retrieve Web pages or other files;
- an **XML** parser that enables LotusScript to interpret and generate **XML** documents, and
- the Tabulator class library that makes it easy to, using just a few lines of LotusScript code, quickly search, select, summarize and sort...

16/3,K/8 (Item 3 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2002 The Gale Group. All rts. reserv.

01902379 Supplier Number: 54937382 (USE FORMAT 7 FOR FULLTEXT)  
**Reuters Chooses Partes as Its Supplier Of EDGAR Filings Data.**  
Business Wire, pl055  
June 21, 1999  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 617

... use of Internet capabilities.  
Partes' EDGAR Data Service is a real-time data feed of processed EDGAR filings that enables commercial data providers to incorporate **real - time** , fully **parsed** EDGAR data into their Web **pages** and applications in a format that matches the look and feel of their own products. Combining an application programming interface with the flexible layout and processing capabilities of **eXtensible Markup Language ( XML )** , the service allows developers to customize EDGAR data to suit users' needs.

Christopher Wurts, Vice President, Equities Marketing, Reuters America, said: "We are happy to...

16/3,K/9 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

04000231 Supplier Number: 45809761 (USE FORMAT 7 FOR FULLTEXT)  
**Iconovex, Interleaf Unveil Plan to Foray Into World Wide Web Arena**  
CommunicationsWeek, pl06  
Sept 25, 1995  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 336

... for distribution both publicly on the Web and for internal distribution.

Interleaf's Cyberleaf is a tool for converting word processing documents into Hyper Text **Markup Language** code. Iconovex's AnchorPage is a linguistic-analysis indexing engine that automatically **parses** a **document** , adds **HTML** tags and, **on the fly** , produces an index or table of contents linked to the new pages.

Businesses have the option to distribute AnchorPage documents either publicly or internally, said...

16/3,K/10 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2002 The Gale Group. All rts. reserv.

12798315 SUPPLIER NUMBER: 66884684 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Internet-appliance technology automates test equipment.(Buyers Guide)**  
Steinfeld, Edward F  
EDN, 45, 21, 157

Oct 12, 2000

DOCUMENT TYPE: Buyers Guide

ISSN: 0012-7515

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 4750

LINE COUNT: 00385

... the ability to display dynamic or changing data on the remote browser. Embedded Web servers provide this capability. Real-time data is provided to the **HTML** pages through buffers, variables, and functions. The embedded Web server connects this real-time or dynamic data to the requested **HTML** page and sends the page with the data to the remote Web browser. To alter the appearance of the dynamic data in the field, you must be able to change the **pages** on the **fly**. A runtime **HTML** **page** **parser**, such as Allegro's SoftPages, in the embedded Web server, enables such changes.

Most embedded Web servers work easily with embedded instrument-control applications. An...

16/3,K/11 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2002 The Gale Group. All rts. reserv.

08196224 SUPPLIER NUMBER: 17591335 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Iconovex, Interleaf unveil plan to foray into World Wide Web arena.

(Interleaf Inc's Cyberleaf conversion software, Iconovex Corp's

AnchorPage linguistic-analysis indexing software)

Frook, John

CommunicationsWeek, n576, p106(1)

Sep 25, 1995

ISSN: 0746-8121

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 353

LINE COUNT: 00033

... for distribution both publicly on the Web and for internal distribution.

Interleaf's Cyberleaf is a tool for converting word processing documents into Hyper Text **Markup Language** code. Iconovex's AnchorPage is a linguistic-analysis indexing engine that automatically **parses** a **document**, adds **HTML** tags and, on the **fly**, produces an index or table of contents linked to the new pages.

Businesses have the option to distribute AnchorPage documents either publicly or internally, said...

16/3,K/12 (Item 1 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext

(c) 2002 CMP Media, LLC. All rts. reserv.

01245153 CMP ACCESSION NUMBER: EET20011105S0070

**XML codes data for net connection**

Charles Gordon, Principal Engineer, NetSilicon Inc., Waltham, Mass.

ELECTRONIC ENGINEERING TIMES, 2001, n 1191, PG94

PUBLICATION DATE: 011105

JOURNAL CODE: EET LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: COMMUNICATIONS - FOCUS: PROGRAMMING THE WEB

WORD COUNT: 1300

... The parser and its application can thus process data records in formats that were developed after the application was written.

The technique is useful for **XML** Web browsers. But most other applications must be written so that the application code knows what the data inside a record represents and what to...

...into a schema compiler and a data record parser and generator. The schema compiler parses the schemas into a set of data structures and **C structure** definitions. The **parser** is used at run-time as part of the application firmware.

--

For the expanded online version of this article and code examples,  
go to eet.com/in...

16/3,K/13 (Item 2 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2002 CMP Media, LLC. All rts. reserv.

01066484 CMP ACCESSION NUMBER: CWK19950925S0097  
Iconovex, Interleaf Unveil Plan to Foray Into World Wide Web Arena (CommWeek Interview)  
JOHN FROOK  
COMMUNICATIONSWEEK, 1995, n 576, PG106  
PUBLICATION DATE: 950925  
JOURNAL CODE: CWK LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: The Internet  
WORD COUNT: 328

... for distribution both publicly on the Web and for internal distribution.

Interleaf's Cyberleaf is a tool for converting word processing documents into Hyper Text Markup Language code. Iconovex's AnchorPage is a linguistic-analysis indexing engine that automatically parses a document, adds HTML tags and, on the fly, produces an index or table of contents linked to the new pages.

Businesses have the option to distribute AnchorPage documents either publicly or internally, said...

16/3,K/14 (Item 1 from file: 674)  
DIALOG(R)File 674:Computer News Fulltext  
(c) 2002 IDG Communications. All rts. reserv.

090565  
From home pages to popularity  
Byline: Mark Gibbs  
Journal: Network World Page Number: 38  
Publication Date: January 15, 2001  
Word Count: 530 Line Count: 48

Text:

... in more than 3.8 million domains on 715,283 IP addresses (www.php.net/usage.php). PHP4 has powerful extensions for services such as XML, Lightweight Directory Access Protocol and Internet Message Access Protocol and includes direct access for a large number of database products, including Oracle and Informix. PHP works like many other Web scripting languages - Web pages requested by a browser that contain embedded PHP scripts are parsed on the fly by the PHP interpreter on the server, and the modified page, stripped of the PHP code, is sent to the browser (www.zend.com/zend/technology.php). The interpreter for the PHP language is the Zend...

...no payload and seems to only affect Windows systems. And it can't infect other computers; it only infects files of the types .php, .htm, .html or .htt in the c:/windows subdirectory. This virus is easily detected and countered but it illustrates an interesting potential problem for all scripting languages...

16/3,K/15 (Item 1 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2002 Business Wire. All rts. reserv.

00057137 19990609160B0249 (USE FORMAT 7 FOR FULLTEXT)

Standard & Poor's Selects Partes' EDGAR Data Service to Provide Real-Time Filings for Standard & Poor's Market Insight  
Business Wire  
Wednesday, June 9, 1999 09:26 EDT  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 807

...application for  
our product."

Partes' EDGAR Data Service is a real-time data feed of processed EDGAR filings that enables commercial data providers to incorporate **real - time** , fully **parsed** EDGAR data into their Web **pages** in a format that matches the look and feel of their own products. Using a simple application programming interface as well as the flexible layout and processing capabilities of **eXtensible Markup Language ( XML )** , the service allows developers to customize EDGAR data to suit their individual needs.  
The EDGAR Data Service utilizes Partes' parsing technology and EDGAR expertise to...



19/3,K/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02370457 SUPPLIER NUMBER: 59278618 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**MFC for non-believers; Alex Telford is an ex-C programmer who returned to the profession to discover that, while he was away, Microsoft had built something called MFC. Here are his early struggles, with tips for those who must follow in his footsteps. (Technology Information)**

EXE, 24(10)

Feb 1, 2000

ISSN: 0268-6872 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 3350 LINE COUNT: 00252

... uPageSize; // next page of buffer

This is all a developer needs to present a login box to the user, call their ISP via dial-up **networking**, ask for the password, access Microsoft's visualc Web page, and then read the html code into a buffer. The developer can then parse the...the button set in apps.exe is custom coded. You can be free about classes, too - whether or when to make a feature into an **object** is under the programmer's control. The text **buffer** started out as a class, then I de-classed it because I was adding functionality too often in the early stages. Just to keep the...

19/3,K/2 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02337226 SUPPLIER NUMBER: 55878859 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Real-time programming made simple. (Product Information)**

Christodoulou, Dimitris

Electronic Engineering Times, 116

Sept 27, 1999

ISSN: 0192-1541 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1222 LINE COUNT: 00104

... to all objects in the setup phase, and few basic properties other than attributes-for all practical purposes, only the location and the contents of **buffer objects** and of **buffer** iterators-can be modified while the application runs in its real-time phase. This too is a consequence of "deferred early binding."

MPI/RT's...

19/3,K/3 (Item 3 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02169585 SUPPLIER NUMBER: 20296536 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Lack of awareness hurts progress on virus defence. (Technology Information)**

Daniel, Dianne

Computing Canada, v24, n5, p23(2)

Feb 9, 1998

ISSN: 0319-0161 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1341 LINE COUNT: 00106

... all of your CPU time and that's really annoying when your machine suddenly slows to a crawl."

To guard against such attacks, products like **Network Associates'** WebScanX offer scanning and blocking capabilities. WebScanX places downloaded applets in a **buffer** where they are compared against known signatures of hostile **objects**. If a match is found, users may block and remove the applet. Other products work at the gateway level.

Anti-virus products also guard against...

19/3,K/4 (Item 4 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02162367 SUPPLIER NUMBER: 20444581 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Windows CE 2.0 networking offers exciting mobile computing possibilities.  
(Microsoft's OS) (Product Information)  
Jones, Anthony  
Microsoft Systems Journal, v13, n5, p53(10)  
May, 1998  
ISSN: 0889-9932 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 6005 LINE COUNT: 00591

... buffer.

What can be done to avoid this? The idea is to prevent the application from totally freezing due to lack of data (either from **network** problems or client problems) without continually peeking at the system **network** buffers. One method is to separate the application into a reading thread and a computation thread that share a common data buffer. Access to this **buffer** would be protected through the use of a synchronization **object** such as an event or mutex. The purpose of the read thread is to continually read data from the **network** and place it in the shared buffer. Once the reading thread has read the minimum amount of data necessary for the computation thread to do...

...a chunk of data from the buffer and perform whatever calculations are necessary. Figure 3 illustrates this by providing two functions, one responsible for reading **network** data (ReadThread), and one for performing the computations on the data (ProcessThread).

Figure 3 Multithreaded Blocking Socket

Common Variables

// Initialize critical section (data) and create...

19/3,K/5 (Item 5 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01848947 SUPPLIER NUMBER: 17507839 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Computer-aided design systems, part III. (The Internet Notebook) (Column)  
Morin, Richard  
UNIX Review, v13, n11, p133(1)  
Oct, 1995  
DOCUMENT TYPE: Column ISSN: 0742-3136 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 648 LINE COUNT: 00055

... BRL-CAD package is a combinatorial-solid-geometry-(CSG) based modeling system that includes an interactive model editor, a ray-tracing library, a generic frame- **buffer** library, and a large collection of related tools. An **object** -oriented ray-tracing library provides the primary method of model interrogation. A whole family of engineering-analysis applications based on the ray-tracing paradigm has been built, including traditional renderers and predictive radar models. A generic frame-buffer library interface with transparent **networking** capability provides hardware-independent access to any display device from any host and other useful output.

Given the origin of the package, it is not...

19/3,K/6 (Item 6 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01778860 SUPPLIER NUMBER: 16863464 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Direct Novell NetWare printing from DOS. (Tutorial)  
Cogan, Douglas  
Windows-DOS Developer's Journal, v6, n4, p23(10)  
April, 1995  
DOCUMENT TYPE: Tutorial ISSN: 1059-2407 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 2791 LINE COUNT: 00337

... field with "\*", which is the wildcard. The LastObjectID field in the ScanBinderyRequest structure should be set to 0xFFFFFFFF. After the command is executed, the response **buffer** contains the **object** ID and name of the first match. Insert this ID into the LastObjectID field and call NetWare again. By iteratively performing SCAN...

...BINDERY can be a valuable **network** investigation tool. You can list all file servers (type 4) or all users (type 1); you can list all objects of any type by inserting...

19/3,K/7 (Item 7 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01671085 SUPPLIER NUMBER: 15066345 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**The internetwork manager's survival guide.**  
Kim, David  
LAN Magazine, v9, n4, p111(5)  
April, 1994  
ISSN: 0898-0012 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 2661 LINE COUNT: 00235

... network manager. This group activates all packet-capture functions and is used to trigger events.

Packet-capture objects require a filter to be set. The **network** manager can engage the packet-capture feature to create capture files and store them in **buffers** for protocol decoding and later examination.

Event **objects** manage the origination and notification of events from a particular device. Log entries and SNMP traps can be triggered by the event group based on...

19/3,K/8 (Item 8 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01481325 SUPPLIER NUMBER: 12123942  
**An object-oriented middleware strategy that works. (Software Views)**  
(Column)  
Millikin, Michael D.  
Data Communications, v21, n6, p35(2)  
April, 1992  
DOCUMENT TYPE: Column ISSN: 0363-6399 LANGUAGE: ENGLISH  
RECORD TYPE: ABSTRACT

...ABSTRACT: computers while still being able to take advantage of enterprise-wide applications. One option is to use middleware, which is software that acts as a **buffer** between the **network** infrastructure and the application developer. The **object** -oriented software provides an interface that is consistent for a variety of functions, such as those provided by operating systems and transport protocols. The software enables programmers to meet the needs of mainframe systems and client/server **networks** because the API (application programming interface) provides insulation from underlying complex workings of **networks**. Programmers, as a result, no longer have to learn all the details of numerous platforms. Firms providing middleware products include Horizon Strategies Inc and Peerlogic...

19/3,K/9 (Item 9 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01435518 SUPPLIER NUMBER: 10867698 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Troubleshooting NetWare. (part one of two) (tutorial)**

Christian, Robert

LAN Technology, v7, n6, p42(10)

June, 1991

DOCUMENT TYPE: tutorial

ISSN: 1042-4695

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 5779

LINE COUNT: 00465

... lead to delays at workstations. In this case, reducing the amount of RAM may lead to decreased waiting time.)

Other summary statistics available include "Routing **Buffers** ," "Open Files," "Transactions," "Bindery **Objects** ," and "Connections." Tracking these statistics on a daily basis will help you catch potential problems before they occur. (Routing - or communications -buffers are areas of memory in a file server that are set aside to hold **network** data packets arriving al-- or leaving the file server. The packets remain in these buffers until they can be processed.)

Comparing the "Peak Used" statistic...

**19/3,K/10 (Item 10 from file: 275)**

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group. All rts. reserv.

01369926

SUPPLIER NUMBER: 09464975

(USE FORMAT 7 OR 9 FOR FULL TEXT)

**Glasnost abounds in ICL's new SV291 VME release. (mainframe operating system) (product announcement)**

Computergram International, n1521, CGI09280001

Sept 28, 1990

DOCUMENT TYPE: product announcement

ISSN: 0268-716X

LANGUAGE:

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 299

LINE COUNT: 00024

**TEXT:**

operating system for its Series 39, adding multi-node partitioning, improved batch and a wide range of new **networking** features. At the same time, the company promised compliance with Issue 3 of the X/Open Co Ltd's applications Portability Guide in the next...

...and Management as an alternative to its own VME File Transfer Facility for transferring data files to and from any remote system connected to the **network** . Also included in SV291 is Connection-Less **Network** Service, the Open Systems standard for interconnecting computer systems on local area **networks** , which provides support for ISO 8473 basic data transfer facility and ISO 9542 automatic re-routing and sharing functions. And X400 electronic mail and Virtual...

...utility is claimed to be up to 70% faster than the existing one, and VME Loader has ben enhanced to use a large input-output **buffer** to make multi-block transfers when reading **Object** Module Format files from disk. ICL says that the new release is easier to install than its predecessors, there is an alternative screen editor, and...

**19/3,K/11 (Item 1 from file: 621)**

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2002 The Gale Group. All rts. reserv.

02696902

Supplier Number: 66289450

(USE FORMAT 7 FOR FULLTEXT)

**Atmel Develops the First CAN DeviceNet Compliant Flash Microcontroller;**

**Atmel Creates Ability to do Full In-System Programming Over a CAN Bus Based On Leading Flash Technology.**

Business Wire, p0003

Oct 24, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 701

... product all the advantages needed to develop any application where product flexibility, programming security, short time-to-market and low costs are required.

Existing CAN **network** with 2.0A and 2.0B nodes are supported by the T89C51CC01 as all channels may be used in one of these two modes. This product handles 15 CAN channels (message **objects**) that are programmable for reception, transmission or receive **buffer** (maximum 120 Bytes). Extensive masking, filtering and buffering of CAN frames reduces the host processor load.

A dual data pointer, 2-Kbyte user data EEPROM...

19/3,K/12 (Item 1 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

01348236 Supplier Number: 41624575 (USE FORMAT 7 FOR FULLTEXT)  
**INTEGRATING NETWORK MANAGEMENT: THE SNMP-TO-CMIP BLEND BEGINS**  
Network Management Systems & Strategies, v2, n20, pN/A  
Oct 22, 1990  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 1640

... Enterprise Management Architecture uses the "common agent" approach -- where a central multiple protocol engine uses the same set of objects and information to manage the **network**. A common API and managed **object** modules will **buffer** the user from the protocols.

SNMP follows closely the OSI SMI, which guides managed object definitions. Where SNMP has diverged, the IETF's OSI Internet...

19/3,K/13 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

07490844 Supplier Number: 62772552 (USE FORMAT 7 FOR FULLTEXT)  
**Large-scale service monitoring; Avesta's Trinity discovers, monitors and maps connectivity on large networks. (Avesta Trinity 2.0.3) (Software Review) (Evaluation)**  
Nance, Network World Test Alliance Barry  
Network World, p40  
June 12, 2000  
Language: English Record Type: Fulltext  
Article Type: Evaluation  
Document Type: Tabloid; Trade  
Word Count: 874

... on Windows NT or Solaris, determines the relationships between network nodes, maintains Trinity's database representation of a network and analyzes connectivity faults.

Trinity's **object** server is middleware that **buffers network** events, while the data store is an Oracle 7.3.4 database. As they discovered and monitored our **network** infrastructure, the agent managers' **network** bandwidth consumption was reasonable, varying from 2% to 8%.

Avesta's approach to discovering nodes on large networks is realistic. We liked being able to...

19/3,K/14 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

05966958 Supplier Number: 53250652 (USE FORMAT 7 FOR FULLTEXT)  
**Dealing With Distributed Objects -- Distributed objects are headed for the enterprise. Now's the time to get ready for their arrival. (Technology Information)**  
Golick, Jerry

Data Communications, p6.,1)

Nov 23, 1998

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 3503

... question. An object is a program-one that gives developers something special, the ability to cut and paste apps employing reusable chunks of code.

Distributed **objects** take that concept further, giving developers a neutral **buffer** between the application layer (Layer 7) and the apps themselves. Layer 7 is typically where **network** services and applications meet, courtesy of APIs (application programming interfaces). But each **network** protocol suite has its own APIs. Thus, programmers need to write their applications for specific protocols.

Distributed objects simplify matters enormously. They act as a...

19/3,K/15 (Item 3 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2002 The Gale Group. All rts. reserv.

05315207 Supplier Number: 48090280 (USE FORMAT 7 FOR FULLTEXT)

**Beyond CAD Into GIS**

Popish, Anthony C.; Wittreich, William P.

Cadence, pN/A

Nov, 1997

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 2768

... topology creation, updating, editing and auditing.

\* Spatial analysis. This lets you analyze topologies in memory. Analysis options include polygon overlay to show intersections and unions, **network** tracing to show a path trace or flood trace and **object** buffering to show **buffers** around node, **networks** or polygons.

\* Thematic Mapping. Presentations for graphic views of nongraphic data using colors, symbols, line formatting and hatch patterns. AutoCAD Map facilitates the creation of...

19/3,K/16 (Item 4 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2002 The Gale Group. All rts. reserv.

04876509 Supplier Number: 47173666 (USE FORMAT 7 FOR FULLTEXT)

**Into Orbit: Object Request Brokers: Servers Of The 21st Century**

Frey, Anthony

Network Computing, p51

March 1, 1997

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 3571

... both a client and server, depending on how it's implemented.

The original TTCP test program uses send-and-receive socket calls to transmit varying **buffer** lengths to the server. Using an **object** -oriented approach, this translates to the **object** method invocation `ttcp.send(buffer)`. Under normal circumstances, this method call would perform some manipulation of the buffer. In our case, this function does nothing explicitly. However, as a result of the call itself, the ORB core formats the **buffer**, marshals the data and sends it to the remote **object**. We then could observe the **network** effects of the method call.

Before a server object can be invoked, the client needs to obtain an Interoperable Object Reference (IOR). IORs can be...

19/3,K/17 (Item 5 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2002 The Gale Group. All rts. reserv.

04399977 Supplier Number: 46454468 (USE FORMAT 7 FOR FULLTEXT)  
**Unite CD Maker brings CD mastering to OS/2 Warp**  
InfoWorld, p115  
June 10, 1996  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 715

... ROM stage off the template pad to create a test stage object in the CD Maker folder. I opened the Drives object and selected several **network** folders that contained more than 500MB of data, and I dragged these folders into the stage object. These folders appeared as shadows in my test...

...16MB. CD Maker also has a very nice test mode that lets you check the reliability of different configurations without losing blank CD-ROMs to **buffer** underruns.

Last, I dragged the test stage **object** to the CD Burner. CD Maker filled the 16MB **buffer** and started test-burning my data to CD. Unlike Windows 3.x products, which typically lock you out of your desktop until a burn is...

19/3,K/18 (Item 1 from file: 160)  
DIALOG(R)File 160:Gale Group PROMT(R)  
(c) 1999 The Gale Group. All rts. reserv.

02230463  
**The Matrox 'X'travaganza**  
News Release April 17, 1989 p. 1

At NCGA, the Company will be displaying a **network** of computers, consisting of an IBM (R) RT (R), an IBM PS/2 (R), a Compaq (R) 386, and an Acer SYS-32/20, each containing either a Matrox (R) PG-1281 or PG2-1281 high-performance, graphics board. This **network** will be operating X under ISC's UNIX (R) and IBM's AIX environments - displaying how fast Matrox graphics boards execute X commands. The Matrox...

... the obscured region can be stored in the off-screen memory, enabling it to be instantly restored when the overlapping window is removed. This frame **buffer** data manipulation allows **objects** to be restored much faster than if they had to be redrawn from scratch, or stored in the host's memory.  
...

19/3,K/19 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2002 The Gale Group. All rts. reserv.

08744228 SUPPLIER NUMBER: 18381076 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Unite CD Maker brings CD mastering to OS/2 Warp. (Cirrus Technology's Unite CD Maker for OS/2 Warp) (Software Review) (Evaluation)**  
Zelinka, Douglas  
InfoWorld, v18, n24, p115(1)  
June 10, 1996  
DOCUMENT TYPE: Evaluation ISSN: 0199-6649 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 754 LINE COUNT: 00058

... ROM stage off the template pad to create a test stage object in the CD Maker folder. I opened the Drives object and selected several **network** folders that contained more than 500MB of data, and I dragged these folders into the stage object. These folders appeared as shadows in my test...

...16MB. CD Maker also has a very nice test mode that lets you check the reliability of different configurations without losing blank CD-ROMs to

**buffer** underruns.

Last, I dragged the test stage **object** to the CD Burner. CD Maker filled the 16MB **buffer** and started test-burning my data to CD. Unlike Windows 3.x products, which typically lock you out of your desktop until a burn is...

19/3,K/20 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2002 The Gale Group. All rts. reserv.

07896528 SUPPLIER NUMBER: 16948473 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Reinventing local government with GIS. (geographic information systems)**  
Wilson, John P.  
Public Works, v126, n6, p38(3)  
May, 1995  
ISSN: 0033-3840 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 2445 LINE COUNT: 00197

... require the user to specify the width of the buffer and others give the user the option of using one of the attributes 'of the **object** to determine the **buffer** width. Hence, the type of street (major, secondary, tertiary, etc.) might be used to buffer residential buildings away from a street **network** (using setbacks of 600 ft for a major street, 200 ft from a secondary street, 100 ft from a tertiary street, etc.). Buffers can help ...

19/3,K/21 (Item 3 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2002 The Gale Group. All rts. reserv.

07883804 SUPPLIER NUMBER: 16915577 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**SunService unveils support services for Solaris migration; designed to make businesses more competitive.**  
Business Wire, p5300017  
May 30, 1995  
LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 745 LINE COUNT: 00078

... ensure proper management of 2.4 environment by the customer.  
The Solaris 2.4 Software Environment  
The Solaris 2.4 software environment delivers system software, **networking** products and utilities. It is the UNIX market leader commanding an installed base of 2.4 million users. Solaris supports more than 10,000 applications with laptop-to-mainframe scalability, built-in **networking** and compatibility across SPARC, x86/Pentium, and soon, PowerPC Platforms. Solaris is the number one choice in UNIX enterprise software environments because it gives businesses...

...many new products, including SPARCcenter 2.4000 and SPARCserver 1000 servers, SuperSPARC MP desktops, the SPARCstation Voyager workstation, Sun Video and high-end graphics frame **buffers** such as the SX, ZX, and TurboZX and **object** computing.  
Pricing and Availability  
The Solaris 2.4 support services are available immediately worldwide through SunService. Pricing varies by customer requirement.  
About SunService  
SunService, a...

19/3,K/22 (Item 4 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2002 The Gale Group. All rts. reserv.

07826398 SUPPLIER NUMBER: 17000284 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**UARTs make possible low-cost networks of embedded systems. (universal asynchronous receiver-transmitters-based embedded system**



**networks) (includes sidebar) (EDN Design Feature)**

Butler, Jim

EDN, v40, n7, p87(8)

March 30, 1995

ISSN: 0012-7515

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 6797

LINE COUNT: 00558

... and autonomous controllers that monitor or control multiple devices. A single device can provide and use network services.

Another useful concept is that of the **network** object. **Network** objects are fundamentally similar to objects in object-oriented languages and add a powerful level of abstraction to **network** -protocol design. A **network** object is a data structure that lets you treat some part of a device as a higher level control **object** instead of as a collection of registers, **buffers**, and other logical elements. This approach makes protocol design more complex but more flexible (Ref 1).

You can take two approaches to application-layer design...

19/3,K/23 (Item 5 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2002 The Gale Group. All rts. reserv.

07259882 SUPPLIER NUMBER: 15373564 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**XDB ships Windows NT database server early; version for OS/2 2.1 is also released. (XDB Systems Inc's XDB-Server 4.0) (Brief Article) (Product Announcement)**

Mace, Scott

InfoWorld, v16, n20, p27(1)

May 16, 1994

DOCUMENT TYPE: Product Announcement

ISSN: 0199-6649

LANGUAGE:

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 384 LINE COUNT: 00030

... make the product compatible with DB2 3.1, the latest version of IBM's mainframe database. XDB 4.0 also adds support for binary large **objects**, which can store text or images.

A configurable index **buffer** allows users to prefetch record IDs from an index during an indexed search. Read-only share enhancements such as index walking and index coverage permit queries to execute by accessing only indexes, speeding up execution. Client/server bulk fetch enhancements reduce **network** overhead and transmission times.

Server-to-server connectivity, including three-part database name access, lets XDB clients connect to multiple 3.3 XDB databases.

XDB...

19/3,K/24 (Item 6 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2002 The Gale Group. All rts. reserv.

06196983 SUPPLIER NUMBER: 12417878 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Taking DDE and OLE to the network. (Dynamic Data Exchange, Object Linking and Embedding) (Internetworking: Technology)**

Guterman, Jimmy

InfoWorld, v14, n29, pS53(2)

July 20, 1992

ISSN: 0199-6649

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1753 LINE COUNT: 00137

... process: thus, when Excel paints a spreadsheet to the screen, it keeps the information needed to keep that spreadsheet in Excel format in a data **buffer**. Displaying such an **object** over a **network** is easy, of course, but what happens when you double-click on a **networked** OLE object? If the software needed to edit an object resides on another machine, does the user have the right to simply access that software...

19/3,K/25 (Item 1 from file: 88)  
DIALOG(R)File 88:Gale Group Business A.R.T.S.  
(c) 2002 The Gale Group. All rts. reserv.

04263468 SUPPLIER NUMBER: 18880948  
**Operating system support for high-speed communication.**  
Druschel, Peter  
Communications of the ACM, v39, n9, p41(11)  
Sep, 1996  
ISSN: 0001-0782 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 8709 LINE COUNT: 00713

... ADT) is layered on top of fbufs to support buffer aggregation. This ADT can combine multiple (discontiguous) fbufs, and allows the manipulation of the resulting **buffer** aggregate as a single data **object**. This is important because data arrives from a **network** generally in the form of multiple independent fragment packets that are stored in separate fbufs. In the interest of avoiding data copying, this initial, discontiguous...

19/3,K/26 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

02032901 55101801  
**Large-scale service monitoring**  
Nance, Barry  
Network World v17n24 PP: 40 Jun 12, 2000  
ISSN: 0887-7661 JRNL CODE: NWW  
WORD COUNT: 1100

...TEXT: on Windows NT or Solaris, determines the relationships between network nodes, maintains Trinity's database representation of a network and analyzes connectivity faults.

Trinity's **object** server is middleware that **buffers network** events, while the data store is an Oracle 7.3.4 database. As they discovered and monitored our **network** infrastructure, the agent managers' **network** bandwidth consumption was reasonable, varying from 2% to 8%.

Avesta's approach to discovering nodes on large networks is realistic. We liked being able to...

19/3,K/27 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01736518 03-87508  
**Dealing with distributed objects**  
Golick, Jerry  
Data Communications v27n17 PP: 62-69 Nov 21, 1998  
ISSN: 0363-6399 JRNL CODE: DCM  
WORD COUNT: 3492

...TEXT: question. An object is a program-one that gives developers something special, the ability to cut and paste apps employing reusable chunks of code.

Distributed **objects** take that concept further, giving developers a neutral **buffer** between the application layer (Layer 7) and the apps themselves. Layer 7 is typically where **network** services and applications meet, courtesy of APIs (application programming interfaces). But each **network** protocol suite has its own APIs. Thus, programmers need to write their applications for specific protocols.

Distributed objects simplify matters enormously. They act as a...

19/3,K/28 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

00743751 93-92972  
**INTEROP: Cultivating the leading edge**  
Cummings, Joanne  
Network World v10n30 PP: S44-S46 Jul 26, 1993  
ISSN: 0887-7661 JRNL CODE: NWW  
WORD COUNT: 1091

...TEXT: the '90s. George provides a clear, high-level picture of where this is taking us.

Finally, there is a natural synergy between object orientation and **networking**; the complexity inherent in a distributed multiplatform environment mandates a software technology that **buffers** users and developers from the underpinnings. **Object** orientation provides just that.

You'll notice that all of the major systems vendors are incorporating object-oriented systems and software into their strategic product...

19/3,K/29 (Item 4 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

00626783 92-41885  
**Taking DDE and OLE to the Network: Windows Cross-Application Communication Protocols Are Readied for Use on LANs**  
Guterman, Jimmy  
InfoWorld v14n29 PP: S53-S54 Jul 20, 1992  
ISSN: 0199-6649 JRNL CODE: IFW  
WORD COUNT: 1627

...TEXT: process: thus, when Excel paints a spreadsheet to the screen, it keeps the information needed to keep that spreadsheet in Excel format in a data **buffer**. Displaying such an **object** over a **network** is easy, of course, but what happens when you double-click on a **networked** OLE object? If the software needed to edit an object resides on another machine, does the user have the right to simply access that software and edit the object? Current software copyright law suggests that such remote object editing would be legal if the software was licensed for **networked** use.

However, most OLE accesses in today's networked situations are for data created in standalone programs. "Networked OLE simply does not exist yet," says...

19/3,K/30 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2002 CMP Media, LLC. All rts. reserv.

01201086 CMP ACCESSION NUMBER: EET19990927S0074  
**Real-time programming made simple**  
Dimitris Christodoulou, Senior Applications Engineer, Sky Computers Inc.,  
Chelmsford, Mass.  
ELECTRONIC ENGINEERING TIMES, 1999, n 1080, PG116  
PUBLICATION DATE: 990927  
JOURNAL CODE: EET LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Embedded Systems - FOCUS: ENVIRONMENTS AND TOOLS  
WORD COUNT: 1144

... to all objects in the setup phase, and few basic properties other than attributes-for all practical purposes, only the location and the contents of **buffer** objects and of **buffer** iterators-can be modified

while the application runs in its real-time phase. This is a consequence of "deferred early binding."

MPI/RT's...

19/3,K/31 (Item 2 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2002 CMP Media, LLC. All rts. reserv.

01179011 CMP ACCESSION NUMBER: DAC19981121S0025  
**Dealing With Distributed Objects - Distributed objects are headed for the enterprise. Now's the time to get ready for their arrival.**  
Jerry Golick, Contributing Editor  
DATA COMMUNICATIONS, 1998, n 2717, PG62  
PUBLICATION DATE: 981121  
JOURNAL CODE: DAC LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Feature - Distributed Objects  
WORD COUNT: 3492

... question. An object is a program-one that gives developers something special, the ability to cut and paste apps employing reusable chunks of code.

Distributed **objects** take that concept further, giving developers a neutral **buffer** between the application layer (Layer 7) and the apps themselves. Layer 7 is typically where **network** services and applications meet, courtesy of APIs (application programming interfaces). But each **network** protocol suite has its own APIs. Thus, programmers need to write their applications for specific protocols.

Distributed objects simplify matters enormously. They act as a...

19/3,K/32 (Item 1 from file: 674)  
DIALOG(R)File 674:Computer News Fulltext  
(c) 2002 IDG Communications. All rts. reserv.

088274  
**Letters to the Editor**  
Journal: Network World  
Publication Date: October 23, 2000  
Word Count: 743 Line Count: 65

Text:

... thick from point A to point B on the screen") to be sent to an accelerator chip on the graphics card which can "draw" these **objects** directly into the frame **buffer**. Things can get a little tight for the frame buffer. At one point a few years ago dual ported static RAM was used on many...

... on, is a definite follower in life and should never be considered a leader. Not only do I spend 10 hours a day as a **network** consultant, but I spend dozens of hours on my home **network**, too. I'm still a healthy, social and caring father whose son and daughter dance, act on stage, travel and are interested in other facets...

19/3,K/33 (Item 2 from file: 674)  
DIALOG(R)File 674:Computer News Fulltext  
(c) 2002 IDG Communications. All rts. reserv.

042026  
**One expert shares his views on Microsoft's security features**  
Byline: Winn Schwartau  
Journal: Network World Page Number: 6  
Publication Date: January 23, 1995

## Text:

...impressive. Windows NT may pass muster with the federal government, but it does not meet the real-world security needs of corporations running complex, heterogeneous **networked** environments. Windows NT, for instance, does not offer confidentiality in file storage or transmission. Nor does it offer a means of controlling the boot process...

... computer and its resources. Windows NT's security administration also leaves a lot to be desired and cannot be depended on for securing an enterprise **network**. C2 BY '92 Microsoft, located in Redmond, Wash., has asserted since the public relations inception of Windows NT a few years back that it would...

... is not alone in coveting. Rival Novell, Inc. of Provo, Utah, has invested millions of dollars in its own C2 security evaluation for its NetWare **network** operating system (NOS). But Novell views security with a much larger enterprise view than Microsoft. It uses encryption, strong authentication, remote access control, integrity models...

... deployment within a company's secretarial pool or in a five-person office. C2 does not have any provisions for virus control, encryption, integrity checking, **network** interconnections or remote accessibility. Any security professional working for a major organization knows that without these features, security remains virtually nonexistent. What's more, C2...

... which files? Who can reassign rights after a rename or a modify? Audit trails, the third Orange Book criterion, can be the savior of a **network** in trouble. In theory, an audit trail can be so granular as to record every keystroke a user enters, as well as every read and...traces of one user's behavior prior to the next user logging on to the same system. Somewhat like a ``warm-boot'' in DOS terms, **object** reuse empties registers, erases user random-access memory and cleans **buffers**. Any prior system **object** should not be allowed to be reused by a subsequent user. Microsoft met the object reuse specs in Windows NT, but did not go any...

... that rating, it does not mean Windows NT security is ready for deployment in a mission-critical corporate environment. WHERE'S THE BEEF? As any **network** administrator knows, if the security is not easy to use and administer, it will be used and administered incorrectly. And in the security administration game...

... NT. The problem, I explained to the developers there, is that once Windows NT security is configured, it's impossible to get the big picture. **Network** administrators cannot scan the lists of users, rights or groups. They cannot map users against access to files or against logon permission times or dates...

... S WORK Windows NT has other security problems, as well. For example, it does not have data cryptography, which is essential to make sure a **network** is reasonably secure from eavesdropping and integrity breaches. Microsoft, which knows encryption technology, easily could have included the appropriate algorithms in software to make Windows...me with one closing thought. ``Have you talked to the Cairo (Windows 95.5) guys yet?'' 2Schwartz is an independent consultant, writer and lecturer on **network** security topics. He can be reached at Interpact, Inc. at (813) 393-6600, or via electronic mail at P00506@psilink.com.

19/3,K/34 (Item 3 from file: 674)

DIALOG(R) File 674:Computer News Fulltext

(c) 2002 IDG Communications. All rts. reserv.

031905

INTEROP: Cultivating the leading edge

Supplement

President Daniel Lynch details future of INTEROP, highlights of this

year's show.

Byline: Interview conducted by Joanne Cummings for  
4Network World

0

Journal: Network World

Publication Date: July 26, 1993

Word Count: 1091 Line Count: 103

Text:

... the '90s. George provides a clear, high-level picture of where this is taking us.

Finally, there is a natural synergy between object orientation and **networking** ; the complexity inherent in a distributed multiplatform environment mandates a software technology that **buffers** users and developers from the underpinnings. **Object** orientation provides just that.

You'll notice that all of the major systems vendors are incorporating object-orientated systems and software into their strategic product...

19/3,K/35 (Item 4 from file: 674)

DIALOG(R)File 674:Computer News Fulltext

(c) 2002 IDG Communications. All rts. reserv.

024262

**Great expectations for OSF DME '94 delivery**

Byline: Elisabeth Horwitt, CW Staff

Journal: Computerworld Page Number: 8

Publication Date: July 06, 1992

Word Count: 984 Line Count: 71

Text:

... management,' said Harriet Schabes, a vice president at Citicorp Technology Office in New York.

Asked what makes DME stand out from earlier efforts as a **network** management standard, several users cited its **object** -oriented architecture, which **buffers network** management applications from the proprietary nature of the devices and systems they are managing.

The system could send out a command to shut down a...

File 238:Abs. in New Tech & Eng. 1981-2002/Jul  
(c) 2002 Reed-Elsevier (UK) Ltd.

File 108:Aerospace Database 1962-2002/Jul  
(c) 2002 AIAA

File 8:EI Compendex(R) 1970-2002/Aug W1  
(c) 2002 Engineering Info. Inc.

File 77:Conference Papers Index 1973-2002/Jul  
(c) 2002 Cambridge Sci Abs

File 35:Dissertation Abs Online 1861-2002/Jul  
(c) 2002 ProQuest Info&Learning

File 202:Information Science Abs. 1966-2002/Jul 03  
(c) Information Today, Inc

File 65:Inside Conferences 1993-2002/Aug W1  
(c) 2002 BLDSC all rts. reserv.

File 2:INSPEC 1969-2002/Aug W1  
(c) 2002 Institution of Electrical Engineers

File 14:Mechanical Engineering Abs 1973-2002/Jul  
(c) 2002 Cambridge Sci Abs

File 233:Internet & Personal Comp. Abs. 1981-2002/Aug  
(c) 2002 Info. Today Inc.

File 94:JICST-EPlus 1985-2002/Jun W2  
(c)2002 Japan Science and Tech Corp(JST)

File 111:TGG Natl.Newspaper Index(SM) 1979-2002/Aug 07  
(c) 2002 The Gale Group

File 603:Newspaper Abstracts 1984-1988  
(c)2001 ProQuest Info&Learning

File 483:Newspaper Abs Daily 1986-2002/Aug 06  
(c) 2002 ProQuest Info&Learning

File 6:NTIS 1964-2002/Aug W3  
(c) 2002 NTIS, Intl Cpyrght All Rights Res

File 144:Pascal 1973-2002/Aug W1  
(c) 2002 INIST/CNRS

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info

File 34:SciSearch(R) Cited Ref Sci 1990-2002/Aug W2  
(c) 2002 Inst for Sci Info

File 99:Wilson Appl. Sci & Tech Abs 1983-2002/Jun  
(c) 2002 The HW Wilson Co.

File 583:Gale Group Globalbase(TM) 1986-2002/Aug 09  
(c) 2002 The Gale Group

File 266:FEDRIP 2002/Jun  
Comp & dist by NTIS, Intl Copyright All Rights Res

File 95:TEME-Technology & Management 1989-2002/Aug W1  
(c) 2002 FIZ TECHNIK

File 438:Library Literature 1984-2002/Jun  
(c) 2002 The HW Wilson Co

File 61:LISA(LIBRARY&INFOSCI) 1969-2002/Jul  
(c) 2002 Reed Reference Publishing

Set	Items	Description
S1	12583	XML OR EXTENSIBLE() (MARKUP OR MARK()UP)
S2	32970	HTML OR SGML OR XHTML OR DHTML OR VRML OR VIRTUAL() REALITY- ( )MODELING() LANGUAGE OR (MARKUP OR MARK()UP)() LANGUAGE? ? OR - (STRUCTURED OR WEB) (1W) (FILE OR FILES OR DOCUMENT? ?)
S3	186	PARS?(3N) (PART? ? OR PARTIAL? OR PORTION? OR PIECE?? OR PI- ECEMEAL OR SECTION? OR FRAGMENT?? OR SEGMENT?? OR BLOCK? ? OR ELEMENT? ? OR UNIT OR UNITS OR COMPONENT? ?) (3N) (DOCUMENT? ? - OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S4	9723	S1:S2(3W) (DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S5	6332103	(PART? ? OR PARTIAL? OR PORTION? ? OR PIECE? ? OR PIECEMEAL OR SECTION? ? OR FRAGMENT? ? OR SEGMENT? ?)
S6	34	S4(3N)S5(3N) (CONSTRUCT? OR BUILD? OR PREPAR? OR ASSEMBL? OR CREAT? OR MAK??? OR FORM??? OR FORMATION? ? OR ARRANG? OR OR- GANIZ? OR ORGANIS? OR PUT????() TOGETHER)
S7	36	PARS?(5N) (REAL() TIME OR ADAPTIV? OR ON(1W) FLY OR GRADUAL? - OR AT(1W) TIME OR AFTER(1W) (OTHER OR NEXT) OR LITTLE(1W) LITTLE- ( ) (5N) (DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE -

```
OR STRUCTURE)
S8      13  S1:S2 AND S3
S9      21  RD S6 (unique items)
S10     29  RD S7 (unique items)
S11     63  S8:S10
S12     47  S11 NOT PY=2001:2002
S13     37  (OBJECT? ?(10N)BUFFER? ?)(S)NETWORK?
S14     30  RD (unique items)
S15     25  S14 NOT PY=2001:2002
S16      5  OBJECT? ?(S)(BUFFER? ?(10N)THRESHOLD? ?)
S17      3  RD (unique items)
```



12/5/1 (Item 1 from file: 238)  
DIALOG(R)File 238:Abs. in New Tech & Eng.  
(c) 2002 Reed-Elsevier (UK) Ltd. All rts. reserv.

0336461 ANTE NUMBER: 100574

**An overview of XML**

AUTHOR(S): Zisman, A.  
JOURNAL: Computing and Control Engineering Journal 11 (4) Aug 2000  
p.165-7. il. refs.  
PUBLICATION YEAR: 2000  
ISSN: 0956-3385  
BLDSC SHELF MARK: 3395.016  
LANGUAGE: English

ABSTRACT: Part of a special issue on informatics containing 8 other articles. The eXtensible Markup Language (XML) has been proposed by the World Wide Web Consortium (W3C) to provide structured information to the Web. XML allows a standard way of searching, displaying, manipulating and exchanging data on the Web. It can also be used to identify, exchange and process distributed data in different applications. Provides an introduction to the use of XML under the following sections: XML basics; Document type definitions; Creating XML documents; Processing XML documents; Applications. (Original abstract - amended)

DESCRIPTORS: Internet; Extensible Markup Language;

12/5/5 (Item 2 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2002 Engineering Info. Inc. All rts. reserv.

05597872 E.I. No: EIP00075230811

**Title: Webvise: Browser and proxy support for open hypermedia structuring mechanisms on the World Wide Web**

Author: Gronbaek, Kaj; Sloth, Lennert; Orbaek, Peter  
Corporate Source: Univ of Aarhus, Aarhus, Den  
Conference Title: The WWW8: 8th International World Wide Web Conference  
Conference Location: Toronto, Ont., Can Conference Date:  
19990511-19990514

E.I. Conference No.: 56977

Source: Computer Networks v 31 n 11 1999. p 1331-1345

Publication Year: 1999

CODEN: 003195 ISSN: 1389-1286

Language: English

Document Type: JA; (Journal Article) Treatment: T; (Theoretical)

Journal Announcement: 0008W3

Abstract: This paper discusses how to augment the World Wide Web with an open hypermedia service (Webvise) that provides structures such as contexts, links, annotations, and guided tours stored in hypermedia databases external to the Web pages. This includes the ability for users collaboratively to create links from parts of HTML Web pages they do not own and support for creating links to parts of Web pages without writing HTML target tags. The method for locating parts of Web pages can locate parts of pages across frame hierarchies and it also supports certain repairs of links that break due to modified Web pages. Support for providing links to/from parts of non-HTML data, such as sound and movie, will be possible via interfaces to plug-ins and Java-based media players. The hypermedia structures are stored in a hypermedia database, developed from the Devise Hypermedia framework, and the service is available on the Web via an ordinary URL. The best user interface for creating and manipulating the structures is currently provided for the Microsoft Internet Explorer 4.x browser through COM integration that utilizes the Explorer's DOM representation of Web-pages. But the structures can also be manipulated and used via special Java applets and a pure proxy server solution is provided for users who only need to browse the structures. A user can create and use the external structures as 'transparency' layers on top of arbitrary Web pages, the user can switch between viewing pages with one or more layers (contexts) of structures or without any external

structures imposed on them. (Author abstract) 33 Refs.

Descriptors: \*World Wide Web; Web browsers; Hypermedia systems; Information services; HTML; Open systems; Computer supported cooperative work

Identifiers: Open hypermedia

Classification Codes:

903.4 (Information Services); 723.5 (Computer Applications)

723 (Computer Software); 903 (Information Science); 722 (Computer Hardware)

72 (COMPUTERS & DATA PROCESSING); 90 (GENERAL ENGINEERING)

12/5/6 (Item 3 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

(c) 2002 Engineering Info. Inc. All rts. reserv.

05118480 E.I. No: EIP98094380661

Title: SONIA: a service for organizing networked information autonomously

Author: Sahami, M.; Yusufali, S.; Baldonado, M.Q.W.

Corporate Source: Stanford Univ, Stanford, CA, USA

Conference Title: Proceedings of the 1998 3rd ACM Conference on Digital Libraries

Conference Location: Pittsburgh, PA, USA Conference Date: 19980623-19980626

Sponsor: ACM; SIGLINK; SIGIR

E.I. Conference No.: 48913

Source: Proceedings of the ACM International Conference on Digital Libraries 1998. ACM, New York, NY, USA. p 200-209

Publication Year: 1998

CODEN: 002373

Language: English

Document Type: CA; (Conference Article) Treatment: A; (Applications)

Journal Announcement: 9811W2

Abstract: The recent explosion of on-line information in Digital Libraries and on the World Wide Web has given rise to a number of query-based search engines and manually constructed topical hierarchies. However, these tools are quickly becoming inadequate as query results grow incomprehensibly large and manual classification in topic hierarchies creates an immense bottleneck. We address these problems with a system for topical information space navigation that combines the query-based and taxonomic systems. We employ machine learning techniques to create dynamic document categorizations based on the full-text of articles that are retrieved in response to users' queries. Our system, named SONIA (Service for Organizing Networked Information Autonomously), has been implemented as part of the Stanford Digital Libraries Testbed. It employs a combination of technologies that takes the results of queries to networked information sources and, in real - time , automatically retrieve, parse and organize these documents into coherent categories for presentation to the user. Moreover, the system can then save such document organizations in user profiles which can then be used to help classify future query results by the same user. SONIA uses a multi-tier approach to extracting relevant terms from documents as well as statistical clustering methods to determine potential topics within a document collection. It also makes use of Bayesian classification techniques to classify new documents within an existing categorization scheme. In this way, it allows users to navigate the results of a query at a more topical level rather than having to examine each document text separately. (Author abstract) 23 Refs.

Descriptors: \*Classification (of information); Indexing (of information); World Wide Web; Information technology; Libraries

Identifiers: Clustering

Classification Codes:

903.4.1 (Libraries)

716.1 (Information & Communication Theory); 722.4 (Digital Computers & Systems); 723.5 (Computer Applications); 903.4 (Information Services);

903.1 (Information Sources & Analysis)

716 (Radar, Radio & TV Electronic Equipment); 722 (Computer Hardware);

723 (Computer Software); 903 (Information Science)

71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 90

(GENERAL ENGINEERING)

12/5/7 (Item 4 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2002 Engineering Info. Inc. All rts. reserv.

04853268 E.I. No: EIP97103884319

**Title:** Designing Dexter-based hypermedia services for the World Wide Web  
**Author:** Gronboeck, Kaj; Bouvin, Niels Olof; Sloth, Lennert  
**Corporate Source:** Aarhus Univ, Aarhus, Den  
**Conference Title:** Proceedings of the 1997 8th ACM Conference on Hypertext  
**Conference Location:** Southampton, UK **Conference Date:** 19970406-19970411  
**Sponsor:** ACM

**E.I. Conference No.:** 47177

**Source:** Proceedings of the ACM Conference on Hypertext 1997. ACM, New York, NY, USA. p 146-156

**Publication Year:** 1997

**CODEN:** 85OBA2

**Language:** English

**Document Type:** CA; (Conference Article) **Treatment:** G; (General Review); T; (Theoretical)

**Journal Announcement:** 9712W2

**Abstract:** This paper discusses how to augment the WWW with a Dexter-based hypermedia service that provides anchors, links and composites as objects stored external to the Web pages. The hypermedia objects are stored in an object-oriented database that is accessible on the Web via an ordinary URL. The Dexter-based hypermedia service is based on the Devise Hypermedia framework. Three client solutions are described and discussed, one that is platform independent based on Netscape Navigator 3.0, utilizing Java, Javascript, and LiveConnect, and two that are platform dependent, one utilizing Netscape plug-ins, and another using Microsoft Internet Explorer 3.0, utilizing mainly ActiveX. The server part is developed as a specialization of the Devise Hypermedia framework accessible through CGI scripts. Thus the system provides the full power of Dexter-based hypermedia to arbitrary Web pages on the Internet. This includes the ability for multiple users to **create** links from **parts** of **HTML** Web **pages** they do not own and support for creating links to parts of Web pages without writing HTML target tags. Support for providing links to/from parts of non-HTML data, such as Quicktime movies or VRML documents will also be possible in the future provided that appropriate open plug-in modules become available. (Author abstract) 26 Refs.

**Descriptors:** \*Interactive computer systems; Wide area networks; High level languages; Database systems; Object oriented programming; Computer aided software engineering; Distributed computer systems

**Identifiers:** World wide web (WWW); Hypertext markup language (HTML); Open hypermedia services; Java programming language

**Classification Codes:**

723.1.1 (Computer Programming Languages)

722.4 (Digital Computers & Systems); 722.3 (Data Communication, Equipment & Techniques); 723.1 (Computer Programming); 723.3 (Database Systems); 723.5 (Computer Applications)

722 (Computer Hardware); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

12/5/8 (Item 5 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2002 Engineering Info. Inc. All rts. reserv.

04194001 E.I. No: EIP95031602253

**Title:** Software Systems in Engineering

**Author:** Tanik, Murat M. (Ed.); Rossak, Wilhelm (Ed.); Cooke, Daniel E. (Ed.)

**Conference Title:** Proceedings of the Energy-Sources Technology Conference  
**Conference Location:** New Orleans, LA, USA **Conference Date:** 19940123-19940126

**Sponsor:** ASME

E.I. Conference No.: 20422  
Source: Software Systems in Engineering American Society of Mechanical Engineers, Petroleum Division (Publication) PD v 59 1994. Publ by ASME, New York, NY, USA. 414p

Publication Year: 1994

CODEN: ASMPEX

Language: English

Document Type: CP; (Conference Proceedings) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 9508W4

Abstract: The Symposium materials contain 49 papers dealing with the complex problems of software engineering. The topics covered include large and integrated systems; modeling, design and manufacturing; process modeling, databases, and multimedia applications.

Descriptors: \*Software engineering; Computer aided engineering; Systems engineering; Project management; Database systems; Real time systems; Expert systems; Process control; Large scale systems; Flexible manufacturing systems

Identifiers: Knowledge acquisition aids; Object oriented databases; Real time databases; Frame based parsing; Multimedia documents; Transport protocols; Multimedia interfaces; Large scale interoperability; Software architectures; Mega-systems

Classification Codes:

723.1 (Computer Programming); 723.2 (Data Processing); 723.3 (Database Systems); 723.4 (Artificial Intelligence); 722.3 (Data Communication, Equipment & Techniques); 731.5 (Robotics)

723 (Computer Software); 722 (Computer Hardware); 731 (Automatic Control Principles)

72 (COMPUTERS & DATA PROCESSING); 73 (CONTROL ENGINEERING)

12/5/9 (Item 6 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2002 Engineering Info. Inc. All rts. reserv.

03966803 E.I. No: EIP94101429785

Title: Adaptive variable-to-variable length codes

Author: Stubbley, Peter R.

Corporate Source: Bell-Northern Reserch

Conference Title: Proceedings of the Data Compression Conference

Conference Location: Snowbird, UT, USA Conference Date: 19940329-19940331

Sponsor: IEEE Computer Society; NASA/CESDIS

E.I. Conference No.: 20754

Source: Proceedings of the Data Compression Conference Proc Data Compression Conf 1994. Publ by IEEE, Computer Society Press, Los Alamitos, CA, USA. p 98-105

Publication Year: 1994

ISBN: 0-8186-5637-9

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 9412W2

Abstract: In the last several years, adaptive codes for fixed-to-variable length and variable-to-fixed length codes have been described. This paper examines two methods for implementing adaptive variable-to-variable length codes, which have not been considered before due to the difficulty of designing optimum variable-to-variable length codes. The two adaptive methods are based on dual-tree codes, where a source tree parses the input sequence into source words and a code tree assigns each source word a code word. One adaptive method uses a single dual-tree code, and uses an algorithm which requires a complex logic circuit to adjust the shape of the source and code trees. The second method, called state-tree-codes, uses a fixed pool of dual-tree codes and a state machine to select which dual-tree code is used. State-tree codes require more memory than the first method, but only a trivial logic circuit is needed to implement the codes, which will result in a very fast circuit. (Author abstract) 8 Refs.

Descriptors: \*Data compression; Information theory; Signal encoding; Algorithms; Adaptive systems

Identifiers: Dual tree codes; State tree codes  
Classification Codes:  
723.2 (Data Processing); 903.1 (Information Sources & Analysis); 723.1  
(Computer Programming); 921.6 (Numerical Methods)  
723 (Computer Software); 903 (Information Science); 921 (Applied  
Mathematics)  
72 (COMPUTERS & DATA PROCESSING); 90 (GENERAL ENGINEERING); 92  
(ENGINEERING MATHEMATICS)

12/5/11 (Item 8 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2002 Engineering Info. Inc. All rts. reserv.

03608220 E.I. Monthly No: EIM9305-029711  
Title: Time dependent multimedia document as an advanced communication  
media.  
Author: Yoneda, Takeshi; Matsushita, Yutaka  
Corporate Source: Keio Univ, Yokohama, Jpn  
Conference Title: Proceedings of the 20th Annual ACM Computer Science  
Conference - CSC '92  
Conference Location: Kansas City, MO, USA Conference Date: 19920303  
E.I. Conference No.: 17887  
Source: 1992 ACM Computer Science Conference Proc 20 Annu ACM Comput Sci  
Conf CSC 92. Publ by ACM, New York, NY, USA. p 533-540  
Publication Year: 1992  
ISBN: 0-89791-472-4  
Language: English  
Document Type: PA; (Conference Paper) Treatment: A; (Applications); G;  
(General Review)  
Journal Announcement: 9305  
Abstract: A method for formally specifying a structure of TDMD (Time  
Dependent Multimedia Document) is proposed. TDMD can include voice, video,  
text, graphics and image. Prototype system is implemented in which an  
interchanged document structure is parsed and each component of the  
document can be presented at intended time at appropriate position.  
(Author abstract) 13 Refs.  
Descriptors: \*VOICE/DATA COMMUNICATION SYSTEMS; DATA PROCESSING; DATA  
STRUCTURES; COMPUTER NETWORKS  
Identifiers: ADVANCED COMMUNICATION MEDIA; TIME DEPENDENT MULTIMEDIA  
DOCUMENT (TDMD); MULTIMEDIA  
Classification Codes:  
722 (Computer Hardware); 723 (Computer Software)  
72 (COMPUTERS & DATA PROCESSING)

12/5/20 (Item 1 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6928458 INSPEC Abstract Number: C2001-06-6160-028  
Title: Flexible representation and querying of heterogeneous structured  
documents  
Author(s): Bordogna, G.; Pasi, G.  
Author Affiliation: Istituto per le Tecnologie Informatiche Multimediali,  
CNR, Milano, Italy  
Journal: Kybernetika vol.36, no.6 p.617-33  
Publisher: Inst. Inf. Theory & Autom. Acad. Sci. Czech Republic,  
Publication Date: 2000 Country of Publication: Czech Republic  
CODEN: KYBNAI ISSN: 0023-5954  
SICI: 0023-5954(2000)36:6L:617:FRQH;1-1  
Material Identity Number: K021-2001-003  
Language: English Document Type: Journal Paper (JP)  
Treatment: Applications (A); Practical (P); Theoretical (T)  
Abstract: We present a fuzzy model for representing documents having a  
hierarchical structure and possibly containing multimedia information. We  
consider an archive containing documents with distinct (heterogeneous)  
logical structures. We also propose a flexible query language for

expressing soft selection conditions on the **structured documents**. The **documents** content is **organized** into thematic (topical) sections where the index terms play a distinct role. The proposed document representation is adaptive to the user, who can indicate the preferred sections of documents, i.e., those which they estimate to bear the most interesting information, and can linguistically quantify the number of sections which determine the global potential interest of the documents. Linguistic quantifiers in the query specify the approximate number of the sections in which the query terms should appear. (31 Refs)

Subfile: C

Descriptors: fuzzy set theory; information retrieval systems; query languages; query processing; vocabulary

Identifiers: flexible representation; flexible querying; heterogeneous structured documents; fuzzy model; document representation; archive; flexible query language; soft selection conditions; thematic sections; linguistic quantifiers; query terms

Class Codes: C6160 (Database management systems (DBMS)); C7240 (Information analysis and indexing); C6140D (High level languages); C7250 (Information storage and retrieval); C1160 (Combinatorial mathematics); C4210 (Formal logic); C4250 (Database theory)

Copyright 2001, IEE

12/5/21 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6590111 INSPEC Abstract Number: C2000-06-6130D-028

**Title: Compression of SMIL documents**

Author(s): Chia-Yuan Teng

Author Affiliation: Nokia Mobile Phones, San Diego, CA, USA

Conference Title: Proceedings DCC 2000. Data Compression Conference p. 572

Editor(s): Storer, J.A.; Cohn, M.

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 2000 Country of Publication: USA xv+586 pp.

ISBN: 0 7695 0592 9 Material Identity Number: XX-2000-00784

U.S. Copyright Clearance Center Code: 0 7695 0592 9/2000/\$10.00

Conference Title: Proceedings DCC 2000. Data Compression Conference

Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Comput. Commun

Conference Date: 28-30 March 2000 Conference Location: Snowbird, UT, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: Summary form only given. The World Wide Web Consortium (W3C) standard synchronized multimedia integration language (SMIL) is an **HTML-like mark-up language** to describe temporal behavior and presentation layout for multimedia objects. SMIL is widely used in today's Internet. Many video clips send SMIL documents to clients before transmitting video and audio streams. Data compression is a process to reduce the number of bits in a representation of data. It can save storage space and reduce bandwidth requirement. Data compression technologies may be classified into two categories: lossless and lossy. The compression technology that can recover data perfectly from the compressed bits is called lossless compression. The one that cannot is called lossy compression. There are many lossless data compression algorithms, such as Ziv-Lempel methods, that have been developed in recent years. However, SMIL document compression performance with such methods is not very impressive because they do not exploit the special format of the SMIL document. As a result, the rate to compress a SMIL document is almost the same as that to compress English text, i.e., 2-4 bits/char. For better compression, a method based on a new parsing technology is proposed. The proposed compression algorithm contains two major procedures: parsing and coding. **Parsing** is a procedure to **segment** a SMIL document into non-overlapping phrases (a string of consecutive characters). Coding is a procedure to assign a codeword to the phrase. Both the phrase and codeword are of variable length. (0 Refs)

Subfile: C

Descriptors: data compression; data structures; document handling;

hypermedia markup languages ; variable length codes

Identifiers: document compression; World Wide Web Consortium;  
synchronized multimedia integration language; SMIL; HTML ; mark - up  
language ; multimedia objects; temporal behavior; presentation layout; data  
compression; data representation; lossless compression; lossy compression;  
performance; parsing; variable length code; variable length phrase

Class Codes: C6130D (Document processing techniques); C6130M (Multimedia)

Copyright 2000, IEE

12/5/22 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6590085 INSPEC Abstract Number: B2000-06-6210L-134, C2000-06-5620W-044

Title: Applications of YK algorithm to the Internet transmission of  
Web-data: implementation issues and modifications

Author(s): Banerji, A.; En-hui Yang

Author Affiliation: Hughes Network Syst. Inc., Germantown, MD, USA

Conference Title: Proceedings DCC 2000. Data Compression Conference p.  
546

Editor(s): Storer, J.A.; Cohn, M.

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 2000 Country of Publication: USA xv+586 pp.

ISBN: 0 7695 0592 9 Material Identity Number: XX-2000-00784

U.S. Copyright Clearance Center Code: 0 7695 0592 9/2000/\$10.00

Conference Title: Proceedings DCC 2000. Data Compression Conference

Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Comput. Commun

Conference Date: 28-30 March 2000 Conference Location: Snowbird, UT,  
USA

Language: English Document Type: Conference Paper (PA)

Treatment: Applications (A); Practical (P)

Abstract: Summary form only given. Recently, Yang and Kieffer (2000) proposed a novel lossless grammar-based data compression algorithm, called the YK algorithm, in which a greedy sequential grammar transform is applied to the original data to construct an irreducible context free grammar, which is encoded indirectly by using an arithmetic coder. The basic implementation of the YK encoding algorithm consists of a sequentially iterative application of three fundamental steps: parsing, arithmetic encoding, and updating. This paper proposes five modifications of the basic YK algorithm, motivated by applications of the algorithm to the Internet transmission of Web-data. 1) Fast YK encoder: The parsing operation is a major step of the YK algorithm. A variant of the tree data structure is proposed for fast parsing. This is applicable for real - time compression of IP datagrams. 2) Pre-defined source statistics: known source statistics can be exploited to improve compression efficiency, which is particularly effective for small IP datagrams with a known structure. 3) Pre-defined grammar: starting with a "typical" pre-defined grammar can significantly improve the compression efficiency for applications such as HTML Web-page compression. 4) Memory constrained implementation: during YK compression, as the length of the data sequence increases, the grammar also continues to grow in size, which can potentially exhaust the available memory in the system. This paper proposes a way to check memory requirement by reusing variables in the grammar, once a user-chosen limit on grammar size is reached. 5) Error handling capability: the paper identifies all possible contingencies that can arise when an erroneous bit-stream is fed to the YK decoder, and provides explicit ways to handle these. This is important in applications where compressed IP datagrams are transmitted over unreliable links. (1 Refs)

Subfile: B C

Descriptors: arithmetic codes; data compression; grammars; Internet;  
iterative methods; transforms; tree data structures

Identifiers: YK algorithm; Internet transmission; Web-data; lossless  
grammar-based data compression; greedy sequential grammar transform;  
irreducible context free grammar; arithmetic coder; stationary ergodic  
sources; sequentially iterative application; parsing; arithmetic encoding;  
updating; dynamic alphabet; parsed substring; frequency counts; real-time  
compression; IP datagrams; pre-defined source statistics; NNTP datagrams;

pre-defined grammar; HTML Web-page compression; memory constrained implementation; error handling capability; YK decoder; compressed IP datagrams; unreliable links

Class Codes: B6210L (Computer communications); B6120B (Codes); C5620W (Other computer networks); C7210N (Information networks); C4210L (Formal languages and computational linguistics); C6120 (File organisation)

Copyright 2000, IEE

12/5/23 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6370745 INSPEC Abstract Number: C1999-11-6130D-012

**Title: Automatic generation of database schema for structured hypermedia documents**

Author(s): Law, K.C.K.; Ip, H.H.S.; Fang Wei

Author Affiliation: Image Comput. Group, Hong Kong City Univ., Kowloon, Hong Kong

Conference Title: Managing Information Technology Resources in Organizations in the Next Millennium. 1999 Information Resources Management Association International Conference p.673-82

Editor(s): Khosrowpour, M.

Publisher: Idea Group Publishing, Hershey, PA, USA

Publication Date: 1999 Country of Publication: USA 1140 pp.

ISBN: 1 878289 51 9 Material Identity Number: XX-1999-01300

Conference Title: Proceedings of the 1999 Information Resources Management Association International Conference

Conference Date: 16-19 May 1999 Conference Location: Hershey, PA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P); Theoretical (T)

Abstract: We propose a layered model for hypermedia document systems and use this model in the design and implementation of a prototype hypermedia document system. The design of the hypermedia document system requires the storage structure to be closely coupled with the logical structure of a specific class, in order to maintain data integrity and dependency, and to optimize for access control. We focus on some important **components** in our system: **parser**, **tree** generator and database-schema manager. The **parser** and **tree** -generator are used to check the syntax and semantics of the document structure description and generate a tree structure as the document internal representation which can be visualized for the purpose of data capturing and navigating. In determination of the tables and fields of the database in the database-schema-manager, we introduce an algorithm and procedure to generate the final database schema from the document structure tree. The advantages and benefits of this approach are to allow the design and implementation of hypermedia systems to be automated and simplified. (10 Refs)

Subfile: C

Descriptors: authorisation; computational linguistics; data integrity; database theory; grammars; hypermedia; tree data structures

Identifiers: automatic generation; **structured hypermedia documents**; layered model; storage structure; data integrity; data dependency; access control; parser; tree generator; database-schema manager; syntax; semantics; tree structure; visualization; data capture; data navigation

Class Codes: C6130D (Document processing techniques); C6130M (Multimedia); C4250 (Database theory)

Copyright 1999, IEE

12/5/24 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6366976 INSPEC Abstract Number: C1999-11-6130D-009

**Title: SGML and XML content models**

Author(s): Kilpelainen, P.

Author Affiliation: Dept. of Comput. Sci., Helsinki Univ., Finland

Journal: Markup Languages: Theory & Practice vol.1, no.2 p.53-76



Publisher: MIT Press,  
Publication Date: Spring 1999 Country of Publication: USA  
CODEN: MLTPFG ISSN: 1099-6621  
SICI: 1099-6621(199921)1:2L:53:SCM;1-M  
Material Identity Number: H248-1999-002  
U.S. Copyright Clearance Center Code: 1099-6621/99/\$8.00  
Language: English Document Type: Journal Paper (JP)  
Treatment: Theoretical (T)

Abstract: The **SGML** and **XML** standards use a variation of regular expressions called content models for modeling the markup structures of document elements. **SGML** content models may include so called and groups, which are excluded from **XML**. An and group, which is a sequence of subexpressions separated by an &-operator, denotes the sequential catenation of its subexpressions in any possible order. If one wants to shift from **SGML** to **XML** in document production, one has to translate **SGML** content models to corresponding **XML** content models. The allowed content models in both **SGML** and **XML** are restricted by a requirement of determinism, which means that a parser recognizing document element contents has to be able to decide without lookahead, which content model token to match with the current input token, while processing the document from left to right. It is known that not all **SGML** content models can be expressed as an equivalent **XML** content model. It is also known that transforming an **SGML** content model into an equivalent **XML** content model may cause an exponential growth in the length of the content model. We present methods for eliminating and groups and analyze formally the circumstances where they can be applied. We also consider the length of the resulting content models. (18 Refs)

Subfile: C

Descriptors: deterministic automata; grammars; hypermedia markup languages ; page description languages

Identifiers: **SGML** content model; **XML** content model; **XML** standard; **SGML** standard; regular expressions; markup structures; document elements; and groups; subexpression sequence; &-operator; sequential catenation; document production; **SGML** content model translation; determinism; parser; document element content recognition; content model token; input token

Class Codes: C6130D (Document processing techniques); C6140D (High level languages); C4220 (Automata theory); C4210L (Formal languages and computational linguistics)

Copyright 1999, IEE

12/5/25 (Item 6 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6294205 INSPEC Abstract Number: C1999-08-7100-088

Title: Development of **SGML** / **XML** middleware component

Author(s): Ohno, K.; Beyer, M.

Author Affiliation: INS Eng. Corp., Tokyo, Japan

Conference Title: Proceedings of **SGML/XML** Europe '98. From Theory to New Practices p.373-82

Publisher: Graphic Communications Association, Alexandria, VA, USA

Publication Date: 1998 Country of Publication: USA ix+651 pp.

Material Identity Number: XX-1998-01752

Conference Title: Proceedings of **SGML/XML** Europe '98. From Theory to New Practices

Conference Date: 17-21 May 1998 Conference Location: Paris, France

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: An **SGML** /**XML** document management architecture based on a relational database has been developed. The core of the system is implemented as middleware components within three-tier client/server systems. The target of the middleware is the realization of the interfaces for business applications. The API of the middleware are classified into three groups. The first group is called "source document API", which manages the **SGML** / **XML** document instances directly. The second group is called "element API", which manages the parsed element of the document instances. The navigation of the **SGML** / **XML** document and

selection, control, and information update of the elements are made through this API. The third API is "custom API", which enables us to extend and customize the functions of the various business applications. Our concept of SGML / XML database should not only be for the management of documents, but also for broader business application fields. SGML / XML is not simply a framework to define document structure but a framework for API of business applications. This concept will become more clear when the API is defined by CORBA IDL which we are planning to implement in the near future. From such a point of view, management of SGML / XML elements should be important. Such information may include various basic information in a company, but provides a target for security, version control, transaction, etc. Management of related information between those elements should also be important. Thus, elements of documents should naturally be managed within RDBMS. (7 Refs)

Subfile: C

Descriptors: application program interfaces; business data processing; client-server systems; electronic data interchange; page description languages; relational databases

Identifiers: SGML ; XML ; middleware; document management architecture; relational database; three-tier client/server systems; interfaces; business applications; source document API; element API; navigation; custom API; RDBMS

Class Codes: C7100 (Business and administration); C6130D (Document processing techniques); C6160D (Relational databases); C6130E (Data interchange)

Copyright 1999, IEE

12/5/27 (Item 8 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5781873 INSPEC Abstract Number: C9801-6130D-024

**Title: Assembling documents from digital libraries**

Author(s): Ahonen, H.; Heikkinen, B.; Heinonen, O.; Kilpelainen, P.

Author Affiliation: Dept. of Comput. Sci., Helsinki Univ., Finland

Conference Title: Database and Expert Systems Applications. 8th International Conference, DEXA '97. Proceedings p.419-29

Editor(s): Hameurlain, A.; Tjoa, A.M.

Publisher: Springer-Verlag, Berlin, Germany

Publication Date: 1997 Country of Publication: Germany xvii+688 pp.

ISBN: 3 540 63478 9 Material Identity Number: XX97-03116

Conference Title: Database and Expert Systems Applications. 8th International Conference, DEXA '97. Proceedings

Conference Date: 1-5 Sept. 1997 Conference Location: Toulouse, France

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: We consider assembling documents using, as a source, a digital library containing SGML documents. The assembly process contains two parts : 1) finding interesting fragments, and 2) constructing a coherent document. We present a general document assembly framework. First, we describe a system for tailoring control engineering textbooks. Its assembling facilities are rather restricted but, on the other hand, the quality of documents produced is high. Second, we address the problem of filtering and combining interesting information from a large heterogeneous document collection. The methods presented offer various ways to find the interesting document fragments. Moreover, the elements found in the fragments are mapped to generic elements, like sections, paragraph containers, paragraphs and strings, which have known semantics. Hence, even arbitrary compositions can be formatted and printed. (11 Refs)

Subfile: C

Descriptors: computational linguistics; document handling; library automation

Identifiers: digital libraries; document assembling; SGML documents; interesting fragments; coherent document; document assembly framework; control engineering textbooks; assembling facilities; large heterogeneous document collection; document fragments; generic elements; paragraph containers; known semantics; arbitrary compositions

Class Codes: C6130D (Document processing techniques); C 210L (Library automation); C7108 (Desktop publishing); C4210L (Formal languages and computational linguistics)  
Copyright 1997, IEE

12/5/28 (Item 9 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5630494 INSPEC Abstract Number: C9708-6130D-031

Title: READLEX: a lexicon for the recognition and analysis of structured documents  
Author(s): Hoch, R.  
Author Affiliation: German Res. Center for Artificial Intelligence, Kaiserslautern, Germany  
Conference Title: Proceedings of the Third International Conference on Document Analysis and Recognition Part vol.2 p.549-52 vol.2  
Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA  
Publication Date: 1995 Country of Publication: USA 2 vol. xxvi+1188 pp.  
ISBN: 0 8186 7128 9 Material Identity Number: XX97-01463  
U.S. Copyright Clearance Center Code: 0 8186 7128 9/95/\$4.00  
Conference Title: Proceedings of 3rd International Conference on Document Analysis and Recognition  
Conference Sponsor: IAPR TC-11, TC-10; Canadian Image Process. & Pattern Recognition Soc.; Centre for Pattern Recognition & Machine Intelligence; IEEE, Sect. Montreal; Lab. Scribens; Int. Graphonomics Soc.; Centre de res. inf. Montreal; Inst. Robotics & Intelligence Syst  
Conference Date: 14-16 Aug. 1995 Conference Location: Montreal, Que., Canada

Language: English Document Type: Conference Paper (PA)  
Treatment: Practical (P)  
Abstract: This paper describes the architecture of a lexicon system called READLEX dealing with requirements of both text recognition and text analysis in document analysis. In order to meet these requirements, we have developed a concept for the automatic acquisition and generation of the lexicon. The heart of the lexicon system is based on redundant hash addressing techniques. Currently, the lexicon is used for the contextual post-processing of OCR results as well as the categorization of texts within structured documents. Other components for document analysis such as the address parser and a text pattern matcher also make use of the lexicon. (19 Refs)

Subfile: C  
Descriptors: document image processing; knowledge acquisition; optical character recognition  
Identifiers: text recognition; text analysis; document analysis; READLEX; lexicon; structured documents; redundant hash addressing; contextual post-processing; OCR; address parser; text pattern matcher  
Class Codes: C6130D (Document processing techniques); C5260B (Computer vision and image processing techniques); C1250B (Character recognition); C6170K (Knowledge engineering techniques); C6170T (Knowledge engineering tools)

Copyright 1997, IEE

12/5/29 (Item 10 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5629030 INSPEC Abstract Number: C9708-6130D-022

Title: Chem)DeT/sub E/X automatic generation of a markup language description of (chemical) documents from bitmap images  
Author(s): Simon, A.; Pret, J.-C.; Johnson, A.P.  
Author Affiliation: Sch. of Chem., Leeds Univ., UK  
Conference Title: Proceedings of the Third International Conference on Document Analysis and Recognition Part vol.1 p.458-61 vol.1  
Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA

Publication Date: 1995 Country of Publication: USA 2 vol. xxvi+1188 pp.

ISBN: 0 8186 7128 9 Material Identity Number: XX95-02133

U.S. Copyright Clearance Center Code: 0 8186 7128 9/95/\$4.00

Conference Title: Proceedings of 3rd International Conference on Document Analysis and Recognition

Conference Sponsor: IAPR TC-11, TC-10; Canadian Image Process. & Pattern Recognition Soc.; Centre for Pattern Recognition & Machine Intelligence; IEEE, Sect. Montreal; Lab. Scribens; Int. Graphonomics Soc.; Centre de res. inf. Montreal; Inst. Robotics & Intelligence Syst

Conference Date: 14-16 Aug. 1995 Conference Location: Montreal, Que., Canada

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: This paper presents a novel view of document processing, as being the reverse process to T/sub E/X. This concept simplifies the analysis of the physical structure of documents, and also suggests the use of a style file for layout recognition. An algorithm is given for both phases, layout analysis and layout recognition. The bottom-up layout analysis method employed is based on the Kruskal's algorithm and uses the distances between the components to construct the physical page structure. The algorithm is linear with respect to the number of the connected components. For layout recognition, a document style description language (DSDL) is introduced. This helps a fault-tolerant, recursive parsing algorithm to label the blocks of the document. The presented methods were designed to be used for scientific publications (papers, reports, books), but could be applied to a broader range of documents. (4 Refs)

Subfile: C

Descriptors: document handling; page description languages

Identifiers: markup language description; bitmap images; document processing; style file; layout recognition; layout analysis; Kruskal's algorithm; physical page structure; chemical documents; scientific publications; recursive parsing algorithm; document style description language; DSDL

Class Codes: C6130D (Document processing techniques); C6140D (High level languages)

Copyright 1997, IEE

12/5/30 (Item 11 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5571169 INSPEC Abstract Number: B9706-6130-021, C9706-5260S-016

Title: Spontaneous speech understanding method based on LR parsing of keyword lattice

Author(s): Tsuboi, H.; Takebayashi, Y.; Hashimoto, H.

Author Affiliation: Kansai Res. Lab., Toshiba Corp., Japan

Journal: Transactions of the Information Processing Society of Japan  
vol.38, no.2 p.260-9

Publisher: Inf. Process. Soc. Japan,

Publication Date: Feb. 1997 Country of Publication: Japan

CODEN: JSGRD5 ISSN: 0387-5806

SICI: 0387-5806(199702)38:2L:260:SSUM;1-A

Material Identity Number: T205-97004

Language: Japanese Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: The paper describes a task oriented spontaneous speech understanding method, which extracts semantic content from the spotted keyword lattice using a newly developed generalized LR parser. Whenever a set of hypothesized keywords are spotted, the parser is driven by events to construct a semantic structure using a semantic keyword grammar. This efficient parsing enables real time initial state free speech understanding for spontaneous speech. The parser comprises the following functional components: initial state processing to check if a keyword can be an initial keyword, connection processing to check if a current keyword can connect with a hypothesized sub sentence, accept processing to check if a hypothesized sub sentence can be accepted as a sentence. An experiment

was carried out on 350 conversational sentences from a .9 word vocabulary fast food ordering task by 2 males. Accuracies of sentence understanding for top three candidates and word recognition for top candidate, were 82.2% and 90.7%, respectively. (24 Refs)

Subfile: B C

Descriptors: grammars; real-time systems; speech processing; speech recognition; word processing

Identifiers: semantic content extraction; LR parsing; keyword lattice; task oriented spontaneous speech understanding method; spotted keyword lattice; generalized LR parser; hypothesized keywords; semantic structure; semantic keyword grammar; efficient parsing; real time initial state free speech understanding; initial state processing; initial keyword; connection processing; hypothesized sub sentence; accept processing; conversational sentences; 49 word vocabulary fast food ordering task; sentence understanding; word recognition

Class Codes: B6130 (Speech analysis and processing techniques); C5260S (Speech processing techniques); C1250C (Speech recognition); C6180N (Natural language processing); C4210L (Formal languages and computational linguistics); C6130D (Document processing techniques)

Copyright 1997, IEE

12/5/31 (Item 12 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5267106 INSPEC Abstract Number: C9606-6110J-039

**Title: Expressing and processing constraints in Eiffel**

Author(s): Suppiah, A.; Lawson, T.; Jones, A.

Author Affiliation: Dept. of Comput. Math., Univ. of Wales Coll. of Cardiff, UK

Conference Title: Technology of Object-Oriented Languages and Systems, TOOLS 13. Proceedings of the Thirteenth International Conference TOOLS Europe '94 p.337-47

Editor(s): Magnusson, B.; Meyer, B.; Nerson, J.-M.; Perrot, J.-F.

Publisher: Prentice Hall, Hemel Hempstead, UK

Publication Date: 1994 Country of Publication: UK ix+550 pp.

ISBN: 0 13 350539 1 Material Identity Number: XX94-00750

Conference Title: Proceedings of TOOLS Europe '94. 13th International Conference on Technology of Object-Oriented Languages and Systems

Conference Date: 7-11 March 1994 Conference Location: Versailles, France

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: Describes a technique to express general constraints in Eiffel code. The constraint expressions are converted into **parse trees at run time**. These **structure** can then be used in computations involving the constraints. We describe a set of Eiffel classes supporting the expression of such constraints in Eiffel code. These classes represent binary relations and conjunctions in general. The potential of these classes is demonstrated by describing a system that accepts temporal constraint expressions and produces corresponding parse trees which can then be converted into a critical path network of events. Extracting the critical path from this structure is shown to illustrate the usefulness of this system. (9 Refs)

Subfile: C

Descriptors: constraint handling; object-oriented languages; program compilers; trees (mathematics)

Identifiers: Eiffel code; temporal constraint expressions; parse trees; run-time expression conversion; Eiffel classes; binary relations; conjunctions; critical path network; events

Class Codes: C6110J (Object-oriented programming); C6140D (High level languages); C6110L (Logic programming); C6150C (Compilers, interpreters and other processors)

Copyright 1996, IEE

12/5/32 (Item 13 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5242584 INSPEC Abstract Number: C9605-6160D-014

**Title: Querying structured hyperdocuments**

Author(s): Yong Kyu Lee; Seong-Joon Yoo; Kyoungro Yoon; Berra, P.B.

Author Affiliation: Sch. of Comput. & Inf. Sci., Syracuse Univ., NY, USA

Conference Title: Proceedings of the Twenty-Ninth Hawaii International Conference on System Sciences Part vol.2 p.155-64 vol.2

Editor(s): Nunmaker, J.F., Jr.; Sprague, R.H., Jr.

Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA

Publication Date: 1996 Country of Publication: USA 5 vol.  
(xxiii+775+ xviii+517+592+xvii+510+x+187) pp.

ISBN: 0 8186 7327 3 Material Identity Number: XX96-00866

U.S. Copyright Clearance Center Code: 1060-3425/96/\$5.00

Conference Title: Proceedings of HICSS-29: 29th Hawaii International Conference on System Sciences

Conference Sponsor: Univ. Hawaii; Univ. Hawaii College of Bus. Adm

Conference Date: 3-6 Jan. 1996 Conference Location: Wailea, HI, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: We present a document model which integrates the logical structure and hypertext link structure of hyperdocuments in order to manage **structured documents** with hypertext links. Based on this model we define a new structure query language which expresses the structure query using path expressions. To process a structure query in a document management system which represents structure information as database relations, costly join operations are used to find a relationship between elements in a document hierarchy. In order to overcome this problem, schemes based on the **parse tree** and **element** locator have been used (Blake, 1994). We propose a new structure query processing scheme that uses unique element identifiers (UIDs) to evaluate structure queries. Our scheme has advantages over previous schemes since it can obtain the UID's of the ancestors and descendents directly from the UID of a node without disk access. We present relational database schemes for our scheme as well as others and compare the query processing costs. In order to support direct access to a document element, keyword indices to it should be provided. We propose three kinds of inverted index structures for efficient structure query processing. (28 Refs)

Subfile: C

Descriptors: document handling; hypermedia; query languages; query processing; relational databases

Identifiers: structured hyperdocument querying; document model; logical structure; hypertext link structure; **structured document** management; hypertext links; structure query language; path expressions; structure query processing; document management system; database relations; join operations; document hierarchy; parse tree; element locator; unique element identifiers; disk access; relational database; keyword indices; inverted index structures

Class Codes: C6160D (Relational databases); C6130M (Multimedia); C6130D (Document processing techniques); C6140D (High level languages)

Copyright 1996, IEE

12/5/33 (Item 14 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

4951040 INSPEC Abstract Number: C9506-6130D-043

**Title: Page grammars and page parsing. A syntactic approach to document layout recognition**

Author(s): Conway, A.

Author Affiliation: Hitachi Dublin Lab., Trinity Coll., Dublin, Ireland  
p.761-4

Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA

Publication Date: 1993 Country of Publication: USA xx+963 pp.

ISBN: 0 8186 4960 7

U.S. Copyright Clearance Center Code: 0 8186 4960 7/93/\$3.00

Conference Title: Proceedings of 2nd International Conference on Document Analysis and Recognition (ICDAR '93)

Conference Sponsor: IAPR TC-11 & TC-10; IEEE Comput. Soc. & IGS

Conference Date: 20-22 Oct. 1993 Conference Location: Tsukuba Science City, Japan

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: Describes a syntactic approach to deducing the logical structure of printed documents from their physical layout. Page layout is described by a two-dimensional grammar, similar to a context-free string grammar, and a chart **parser** is used to **parse segmented page** images according to the grammar. This process is part of a system which reads scanned document images and produces computer-readable text in a logical mark-up format such as **SGML**. The system is briefly outlined, the grammar formalism and the parsing algorithm are described in detail, and some experimental results are reported. (10 Refs)

Subfile: C

Descriptors: context-free grammars; document image processing; image recognition; page description languages

Identifiers: logical document structure deduction; page layout; 2D grammar; page grammars; page parsing; document layout recognition; syntactic approach; context-free string grammar; chart parser; segmented page images; scanned document images; computer-readable text; logical mark-up format; **SGML**

Class Codes: C6130D (Document processing techniques); C5260B (Computer vision and image processing techniques); C4210L (Formal languages and computational linguistics)

Copyright 1995, IEE

12/5/39 (Item 2 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

(c) 2002 Info. Today Inc. All rts. reserv.

00463098 97WW06-011

**Tool unites Womex developers in U.S., Ireland**

Carr, David F

WebWeek , June 2, 1997 , v3 n16 p17, 20, 2 Page(s)

ISSN: 1081-3071

Company Name: World Merchandise Exchange; Wallop Software

Product Name: Womex Online; Build-IT

Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Focuses on Womex Online, a service operated by the World Merchandise Exchange, and its use of Wallop Software's BuildIT for Web content management. Says that Womex Online is deployed to servers in Norwalk, CT and Dublin, Ireland. Explains that Build-IT helps a distributed team of editors, artists, and programmers to coordinate their efforts. Adds that the Build-IT client allows developers to click on any **component** to launch the appropriate editor, **parses HTML files** to show links and dependencies, and helps move pages between Windows NT and Unix servers despite different file-naming conventions. Notes that Build-IT 2.0 will add JavaScript support, integrates with version control systems, allows the creation of custom workflows and stages of deployment, allows users to manually define dependencies, and works through firewalls. (smg)

Descriptors: Corporate Information; Retailing; Online Information; Software Tools; Web Tools; **HTML** ; Java

Identifiers: Womex Online; Build-IT; World Merchandise Exchange; Wallop Software

12/5/41 (Item 4 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

(c) 2002 Info. Today Inc. All rts. reserv.

00421403 96DD04-006

**HTML conversion and FTP automation -- Automating the conversion process**

**while empowering users**

Hightower, Lauren

Dr. Dobb's Journal , April 1, 1996 , v21 n4 p82-86, 94+, 5 Page(s)

ISSN: 1044-789X

Company Name: Lauren Hightower

Product Name: HTML Automator

Languages: English

Document Type: Feature Articles and News

Geographic Location: United States

Discusses HTML Automator, a program that automates the process of converting data stored on a Web server without IS intervention. Adds that it ensures a standard on all HTML documents within a company. Notes that it uses configuration files to track the important **pieces** it needs to **create HTML files**, and it incorporates standard header and footer files into each HTML file it generates. Describes the conversion module, which supports most popular database and spreadsheet file formats and enables reliable mark up of selected files; and the FTP module, which runs over a Windows socket, allows access to WWW directories, facilitates changing directories on the FTP server, and reliably transfers the converted file to the appropriate directory on the FTP server. Includes four charts, a screen display, a diagram, and a source code listing. (dpm)

Descriptors: HTML; Programming Design; C Programming Language; Web Tools; Server

Identifiers: HTML Automator; Lauren Hightower

12/5/42 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

03233541 JICST ACCESSION NUMBER: 97A0822698 FILE SEGMENT: JICST-E

**Integration of Structured Documents and Databases Featuring Dynamic Creation of References.**

MORISHIMA ATSUYUKI (1); KITAGAWA HIROYUKI (2)

(1) Univ. of Tsukuba, Graduate School; (2) Univ. of Tsukuba, Inst. of Inf. Sci. and Electron.

Joho Shori Gakkai Kenkyu Hokoku, 1997, VOL.97,NO.64(DBS-113), PAGE.21-26, FIG.10, REF.6

JOURNAL NUMBER: Z0031BAO ISSN NO: 0919-6072

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:061.68

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: Integration of heterogeneous information resources has been one of the most important issues in recent advanced application environments. In addition to conventional databases, structured documents have been recognized as important information resources recently. In this paper, we present a data model named NR/SD+, a revised version of NR/SD model we developed as a basic data modeling framework for the seamless integration of structured documents and relational databases. NR/SD+ (and NR/SD model) combines an abstract data type named the structured document type and the nested relational structures, and features operators named converters to dynamically convert structured documents into nested relational structures and vice versa. Features of NR/SD+ include its flexibility to cope with various structural constructs which occur in SGML-compliant documents, and capability of direct extraction and manipulation of text elements which appear inside the document hierarchy. These features are achieved by dynamic **creation** of references to **structured document fragments**. (author abst.)

DESCRIPTORS: relational data base; DBMS; word processing; integration(unification); application program; modeling; data type; heterocomputer system; application oriented language; SGML

BROADER DESCRIPTORS: database; computer application system; system; computer application; utilization; information processing; treatment; computer program; software; operation(processing); mold and pattern; multicomputer system; computer system(hardware); programming language;



formal language; language  
CLASSIFICATION CODE(S): JD03030U

12/5/45 (Item 1 from file: 99)  
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs  
(c) 2002 The HW Wilson Co. All rts. reserv.

1909496 H.W. WILSON RECORD NUMBER: BAST99044670

**HTEL: a HyperText Expression Language**

Steensgaard-Madsen, Jorgen;

Software: Practice & Experience v. 29 no8 (July 10 1999) p. 661-75

DOCUMENT TYPE: Feature Article ISSN: 0038-0644 LANGUAGE: English

RECORD STATUS: Corrected or revised record

ABSTRACT: A study of HTEL (HyperText Expression Language) is presented. The study has 2 aims: to describe a domain-specific language and to present a tool used to implement an interpreter for it. The proposed language is of use in the **creation** of **HTML documents** when **part** of the document's content is dynamically established.

DESCRIPTORS: Hypertext Markup Language (Computer language); CGI software;  
Domain knowledge;

15/5/1 (Item 1 from file: 108)  
DIALOG(R)File 108:Aerospace Database  
(c) 2002 AIAA. All rts. reserv.

01584818 N85-34523

**Graphics Interface 1985: Proceedings**

Canadian Information Processing Society, Toronto (Ontario).

CORPORATE CODE: CF520463

1985 435P.

ANNOUNCEMENTS: Previously announced in IAA as A85-40790

PRESENTATION NOTE: Conf. held in Montreal, 27-31 May 1985; sponsored by the Canadian Man-Computer Communications Society, the Computer Graphics Society and Montreal Univ.

NOTE: Original contains color illustrations

LANGUAGE: MULTIPLE; In ENGLISH and FRENCH

COUNTRY OF ORIGIN: Canada COUNTRY OF PUBLICATION: Canada

DOCUMENT TYPE: COLLOQUIA

DOCUMENTS AVAILABLE FROM AIAA Technical Library

OTHER AVAILABILITY: NTIS HC A19/MF A03

JOURNAL ANNOUNCEMENT: STAR8523

Aspects of image synthesis and applications are discussed. Taking into account a theoretical and empirical analysis of coherent ray-tracing, frame **buffer** algorithms for stochastic models, the specification of stochastic **objects** in a hierarchical graphics system, an interactive planning work station, computer graphics for multivariate data, interfacing interactive circuit simulation with standard graphics facilities, and a graphics interface for interactive simulation of packet-switched **networks** are presented. Other subjects studied are related to medical computer graphics, graphical data bases, computer animation, editing and printing systems, user interface, image processing, algorithms, CAD systems, cartography, image perception, geometric modelling, graphic standards, robotics, computer animation and image synthesis, and artificial intelligence. Attention is given to generative design in architecture using an expert system, a low cost geometric modelling system for CAM, the design of a graphics application interface, and the strategic use of business graphics. For individual titles see N85-34524 through N85-34584

DESCRIPTORS: \*COMPUTER GRAPHICS; \*CONFERENCES; ALGORITHMS; ANIMATION; ARTIFICIAL INTELLIGENCE; COLOR CODING; COMPUTER AIDED DESIGN; COMPUTER AIDED MANUFACTURING; COMPUTER AIDED MAPPING; DATA BASES; EXPERT SYSTEMS; GEOGRAPHIC INFORMATION SYSTEMS; GEOMETRY; IMAGE PROCESSING; INTERFACES; PRINTING; PROJECT MANAGEMENT; STOCHASTIC PROCESSES; THEMATIC MAPPING; TURBOMACHINERY

SUBJECT CLASSIFICATION: 7561 Computer Programming & Software (1975-)

15/5/2 (Item 2 from file: 108)  
DIALOG(R)File 108:Aerospace Database  
(c) 2002 AIAA. All rts. reserv.

01526182 A85-40790

**Graphics interface '85; Proceedings of the Conference, Montreal, Canada, May 27-31, 1985**

WEIN, M., ED. (National Research Council of Canada, Ottawa)

Conference sponsored by the Canadian Man-Computer Communications Society, Computer Graphics Society, and Universite de Montreal. Toronto, Canadian Information Processing Society, 1985, 458 p. In English and French. No individual items are abstracted in this volume.

1985

LANGUAGE: MULTIPLE

COUNTRY OF ORIGIN: Canada COUNTRY OF PUBLICATION: Canada

DOCUMENT TYPE: CONFERENCE PROCEEDINGS

JOURNAL ANNOUNCEMENT: IAA8519

Aspects of image synthesis and applications are discussed, taking into account a theoretical and empirical analysis of coherent ray-tracing, frame **buffer** algorithms for stochastic models, the specification of stochastic **objects** in a hierarchical graphics system, an interactive planning work station, computer graphics for multivariate data, interfacing interactive circuit simulation with standard graphics facilities, and a graphics

interface for interactive simulation of packet-switched **networks** . Other subjects studied are related to medical computer graphics, graphical data bases, computer animation, editing and printing systems, user interface, image processing, algorithms, CAD systems, cartography, image perception, geometric modelling, graphic standards, robotics and CAD, computer animation and image synthesis, and artificial intelligence. Attention is given to generative design in architecture using an expert system, a low cost geometric modelling system for CAM, the design of a graphics application interface, and the strategic use of business graphics (G.R.)

SOURCE OF ABSTRACT/SUBFILE: AIAA

DESCRIPTORS: \*COMPUTER GRAPHICS; \*CONFERENCES; ALGORITHMS; ARTIFICIAL INTELLIGENCE; COLOR CODING; COMPUTER AIDED DESIGN; COMPUTER AIDED MANUFACTURING; COMPUTER AIDED MAPPING; COMPUTER ANIMATION; DATA BASES; EXPERT SYSTEMS; GEOGRAPHIC INFORMATION SYSTEMS; GEOMETRY; IMAGE PROCESSING; INTERFACES; PRINTING; PROJECT MANAGEMENT; STOCHASTIC PROCESSES; THEMATIC MAPPING; TURBOMACHINERY

SUBJECT CLASSIFICATION: 7559 Mathematical & Computer Sciences--General (1975-)

15/5/3 (Item 1 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2002 Engineering Info. Inc. All rts. reserv.

05556835 E.I. No: EIP00055171449

Title: **Super-streaming: a new object delivery paradigm for continuous media servers**

Author: Shahabi, Cyrus; Alshayegi, Mohammad H.

Corporate Source: Univ of Southern California, Los Angeles, CA, USA

Source: Multimedia Tools and Applications v 11 n 1 2000. p 129-155

Publication Year: 2000

CODEN: MTAPFB ISSN: 1380-7501

Language: English

Document Type: JA; (Journal Article) Treatment: A; (Applications); T; (Theoretical); X; (Experimental)

Journal Announcement: 0007W1

Abstract: A number of studies have focused on the design of continuous media, CM, (e.g., video and audio) servers to support the real-time delivery of CM objects. These systems have been deployed in local environments such as hotels, hospitals and cruise ships to support media-on-demand applications. They typically stream CM **objects** to the clients with the objective of minimizing the **buffer** space required at the client site. This objective can now be relaxed due to the availability of inexpensive storage devices at the client side. Therefore, we propose a Super-streaming paradigm that can utilize the client side resources in order to improve the utilization of the CM server. To support super-streaming, we propose a technique to enable the CM servers to deliver CM objects at a rate higher than their display bandwidth requirement. We also propose alternative admission control policies to downgrade super-streams in favor of regular streams when the resources are scarce. We demonstrate the superiority of our paradigm over streaming with both analytical and simulation models. Moreover, new distributed applications such as distant-learning, digital libraries, and home entertainment require the delivery of CM objects to geographically disbursed clients. For quality purposes, recently many studies proposed dedicated distributed architectures to support these types of applications. We extend our super-streaming paradigm to be applicable in such distributed architectures. We propose a sophisticated resource management policy to support super-streaming in the presence of multiple servers, **network** links and clients. Due to the complexity involve in modeling these architectures, we only evaluate the performance of super-streaming by a simulation study. (Author abstract) 51 Refs.

Descriptors: \*Client server computer systems; Multimedia systems; Data communication systems; Real time systems; Video on demand; Buffer storage; Resource allocation; Computer simulation; Distributed computer systems; Congestion control (communication)

Identifiers: Continuous media servers; Continuous media delivery; Super streaming; Resource management policy

Classification Codes:

722.4 (Digital Computers & Systems); 723.5 (Computer Applications);  
716.4 (Television Systems & Equipment); 722.1 (Data Storage, Equipment &  
Techniques); 716.1 (Information & Communication Theory)  
722 (Computer Hardware); 723 (Computer Software); 716 (Radar, Radio &  
TV Electronic Equipment)  
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

15/5/4 (Item 2 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

(c) 2002 Engineering Info. Inc. All rts. reserv.

04871690 E.I. No: EIP97113929804

Title: **ATM switch simulation tool based on the C plus plus object oriented programming language**

Author: Malgosa-Sanahuja, Josepmaria; Castells-Cusculloa, Jordi;  
Garcia-Haro, Joan

Corporate Source: Univ of Zaragoza, Zaragoza, Spain

Conference Title: Proceedings of the 1997 6th IEEE Pacific Rim Conference  
on Communications, Computers and Signal Processing. Part 2 (of 2)

Conference Location: Victoria, Can Conference Date: 19970820-19970822

Sponsor: IEEE

E.I. Conference No.: 47264

Source: IEEE Pacific RIM Conference on Communications, Computers, and  
Signal Processing - Proceedings v 2 1997. IEEE, Piscataway, NJ,  
USA, 97CH36060. p 972-976.

Publication Year: 1997

CODEN: 002121

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 9801W2

Abstract: In this paper a software package to simulate ATM switches  
written in C plus plus programming language is presented and its main  
modules and objects described. The core element of our design is a so  
called 'switch element' object that performs the basic operations of  
point-to-point routing and provides additional functionality such as  
buffering and multicasting. The simulator has been designed to accommodate  
the shared-memory and the space-division approaches and even to mix them.  
It is therefore, able to simulate a single-stage NxN switching element and  
a multi-stage interconnection network at different abstraction levels and  
under a multiplicity of input traffic models and connection patterns.

(Author abstract) Refs.

Descriptors: Asynchronous transfer mode; Computer simulation; C  
(programming language); **Object** oriented programming; Interconnection  
**networks** ; Telecommunication traffic; Switching **networks** ; **Buffer**  
storage

Identifiers: Switching elements; Shared memory processors; Point to point  
routing

Classification Codes:

723.1.1 (Computer Programming Languages)

723.5 (Computer Applications); 723.1 (Computer Programming); 722.1  
(Data Storage, Equipment & Techniques)

716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software);  
721 (Computer Circuits & Logic Elements); 722 (Computer Hardware)

71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

15/5/5 (Item 3 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

(c) 2002 Engineering Info. Inc. All rts. reserv.

04670616 E.I. No: EIP97043621637

Title: **Caching of large database objects in web servers**

Author: Jadav, Divyesh; Gupta, Monish; Lakshmi, Seetha

Corporate Source: Syracuse Univ, Syracuse, NY, USA

Conference Title: Proceedings of the 1997 7th International Workshop on  
Research Issues in Data Engineering, RIDE'97

Conference Location: Birmingham, UK    Conference Date: 19970407-19970408  
Sponsor: IEEE  
E.I. Conference No.: 46260  
Source: Proceedings of the IEEE International Workshop on Research Issues  
in Data Engineering 1997. IEEE, Los Alamitos, CA, USA, PR07849. p 10-19  
Publication Year: 1997  
CODEN: 850SAJ  
Language: English  
Document Type: CA; (Conference Article)    Treatment: T; (Theoretical)  
Journal Announcement: 9706W1

Abstract: The popularity of the World Wide Web has been increasing at an exponential rate of late. As such growth was unanticipated, the infrastructure is increasingly experiencing problems. The combination of increased network bandwidth demand and overloaded servers results in increased data retrieval latency for the end-user. Caching data at appropriate points in the Web helps alleviate this problem. Almost all previous and existing web servers use a flat file approach to store data, with use of database management systems (DBMSs) rudimentary, if extant at all. Storing pages in a file system may result in faster retrieval, but storing them in a DBMS gives the user greater administrative control. The use of a DBMS in a web server, and the concomitant implication of frequently changing data, complicates the caching problem in Web-based applications. The Illustra Object Relational DBMS provides a flexible and user-friendly environment for building Web applications where all the server data is stored in the DBMS. In this paper, we develop a caching scheme for large objects in the Web DataBlade module of the Illustra ORDBMS. Implementation details and preliminary performance results are presented. (Author abstract) 17 Refs.

Descriptors: **Buffer** storage; Relational database systems; Computer networks ; **Object** oriented programming; Information retrieval

Identifiers: Web servers; Web DataBlade module; File system

Classification Codes:

722.1 (Data Storage, Equipment & Techniques); 723.3 (Database Systems);  
723.2 (Data Processing); 723.1 (Computer Programming); 903.3  
(Information Retrieval & Use)

722 (Computer Hardware); 723 (Computer Software); 903 (Information Science)

72 (COMPUTERS & DATA PROCESSING); 90 (GENERAL ENGINEERING)

15/5/6        (Item 4 from file: 8)  
DIALOG(R)File    8:Ei Compendex(R)  
(c) 2002 Engineering Info. Inc. All rts. reserv.

04268920    E.I. No: EIP95102892913

Title: Evaluating multi-port frame buffer designs for a mesh-connected multicomputer

Author: Stoll, Gordon; Wei, Bin; Clark, Douglas; Felten, Edward W.; Li, Kai; Hanrahan, Patrick

Corporate Source: Princeton Univ, Princeton, NJ, USA

Conference Title: Proceedings of the 1995 22nd Annual International Symposium on Computer Architecture

Conference Location: Santa Margherita Ligure, Italy    Conference Date: 19950622-19950624

Sponsor: ACM SIGARCH; IEEE

E.I. Conference No.: 43784

Source: Conference Proceedings - Annual International Symposium on Computer Architecture 1995., 95CH35801. p 96-105

Publication Year: 1995

CODEN: CPAADU    ISSN: 0884-7495    ISBN: 0-7803-3000-5

Language: English

Document Type: CA; (Conference Article)    Treatment: G; (General Review)

Journal Announcement: 9512W2

Abstract: Multicomputers can be effectively used for interactive graphics rendering only if there are mechanisms available to rapidly composite and transfer images to an external display device. One method for achieving the necessary bandwidth for this operation is to provide multiple high-bandwidth ports into a frame buffer. In this paper, we evaluate the

design space of a multi-port frame buffer design for the Intel Paragon mesh routing network. We use an instrumented rendering system to capture the graphics operations needed for rendering a number of three-dimensional scenes; we then use those workloads as input to test programs running on the Paragon to estimate the performance of our hardware. Our experiments consider three major design questions: how many network ports the frame buffer needs, whether Z-Buffering should be done in hardware on the frame buffer or in software on the computing nodes, and whether the design alternatives are scalable. (Author abstract) 18 Refs.

Descriptors: \*Buffer storage; Computer architecture; Bandwidth; Computer software; Multiprocessing systems; Computer networks; Computer graphics

Identifiers: Multiport frame **buffer** design; Mesh connected multicomputer; Intel Paragon mesh routing **network**; **Object** parallel rendering process

Classification Codes:

722.1 (Data Storage, Equipment & Techniques); 723.1 (Computer Programming); 723.2 (Data Processing); 722.4 (Digital Computers & Systems); 723.5 (Computer Applications)

722 (Computer Hardware); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

15/5/7 (Item 5 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

(c) 2002 Engineering Info. Inc. All rts. reserv.

04205574 E.I. No: EIP95072770071

**Title: mu Choices: An object-oriented multimedia operating system**

Author: Campbell, Roy H.; Tan, See-Mong

Corporate Source: Univ of Illinois at Urbana-Champaign, Urbana, IL, USA

Conference Title: Proceedings of the 5th Workshop on Hot Topics in Operating Systems (HOTOS-V)

Conference Location: Orcas Island, WA, USA Conference Date: 19950504-19950505

Sponsor: IEEE Computer Society

E.I. Conference No.: 43252

Source: Proceedings of the Workshop on Hot Topics in Operating Systems - HOTOS 1995. IEEE, Los Alamitos, USA, 95TH8059. p 90-94

Publication Year: 1995

CODEN: 002082

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 9509W2

Abstract: This paper describes the design of the mu Choices object-oriented multimedia operating system. mu Choices provides an architecture for interconnecting different OS subsystems, with these subsystems realized as separate modules. The modules will be implemented as independent object-oriented frameworks. Frameworks interact through exported abstract interfaces. The sub-classing of components within frameworks enables application and media-specific customization. mu Choices also provides a unified scheme for memory handling and passing across, as well as between, all OS subsystems. This allows buffer transfers and manipulation within and between operating system modules without copying, while allowing subsystems to specialize their views of memory buffers for efficient handling of problem-specific behavior. Interpreted agents may be embedded in the kernel that can control system level processing of multimedia streams without interference, eliminating excessive system call overhead. Operating system support for authentication, encryption, and delegation is transparently provided via an extensible framework that customizes interfaces to operating system resources. A new networking subsystem based on an Asynchronous Transfer Mode network environment will allow Quality of Service guarantees within the network protocol stack. These features are combined in mu Choices to give an environment that will support high bandwidth multimedia streams. (Author abstract) 27 Refs.

Descriptors: Computer operating systems; **Object** oriented programming; Computer architecture; Interconnection **networks**; Interfaces (computer); **Buffer** storage; Process control; Asynchronous transfer mode; Network protocols; Computer networks

Identifiers: Object oriented multimedia operating system; Media specific customization; Problem specific behavior; Multimedia streams; Operating system support; Networking subsystem

Classification Codes:

723.1 (Computer Programming); 722.2 (Computer Peripheral Equipment); 722.1 (Data Storage, Equipment & Techniques); 731.3 (Specific Variables Control)

722 (Computer Hardware); 723 (Computer Software); 731 (Automatic Control Principles)

72 (COMPUTERS & DATA PROCESSING); 73 (CONTROL ENGINEERING)

15/5/8 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

(c) 2002 ProQuest Info&Learning. All rts. reserv.

01808113 ORDER NO: AADAA-I9937360

OMSOFT: A change management paradigm

Author: Suryanarayana, Manjunath M.

Degree: Ph.D.

Year: 1997

Corporate Source/Institution: Rutgers The State University of New Jersey  
- New Brunswick (0190)

Director: B. Gopinath

Source: VOLUME 60/07-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 3474. 213 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL

Descriptor Codes: 0544

ISBN: 0-599-38591-X

In this research, we address the problems with engineering of large-scale evolving software. We have designed and implemented a distributed software development environment called OMSOFT (Object Management SOFTWARE). It implements CORBA 2.0. The goal of OMSOFT is to reduce the time and costs involved in deploying large network applications. Each interface of an object in OMSOFT has a global identification number. Rules for interface and application compatibility have been defined. When a new object is built, developers check-in version numbers and global ids of all its interfaces. This helps the manager in checking whether all the interfaces are compatible. OMSOFT implements a distributed selection algorithm to generate a partial order of all unique compatible systems. The complexity of the distributed algorithm is  $\langle \textit{NLog} \rangle \langle \textit{N} \rangle$ , where  $N$  is the number of object versions. By using some policy, manager chooses the required compatible system from that partial order. OMSOFT supports one such policy using monotonically increasing object version numbers.

OMSOFT enables the human manager to setup the **network**, and perform consistent and transparent dynamic update. We have enabled the manager to transparently understand completion of transactions from outside (without the participation of the objects) by providing: IDL descriptions associated with different interfaces (written by developers), the ability to intercept and control all the interactions between application objects using the RESTCLK interaction model, and the ability to convert raw data obtained from the object states and clocks into meaningful data using IDL Offset Compiler. RESTCLK supports automated sequential flow of control and data through a dynamically varying number of port-sets placed along a closed ring, facilitating external observation and control, and provides a buffer size of one. We have provided the manager ability to hold/release interfaces when necessary, only when the appropriate management ports have the control (advance). Manager obtains/specifies stable initial conditions. Dynamic changes include create/destroy **object**, create/destroy clock, tune/detune port, add/destroy clock phase. **Buffer** size of 1 reduces complexity of reasoning about protocols. **Objects** *voluntarily* give out sane points of dynamic reconfiguration along each of the ports, which minimizes disruption to achieve quiescence.

15/5/9 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6757630 INSPEC Abstract Number: C2000-12-6110J-031

**Title: Using Java object serialization: a few pitfalls**

Author(s): Evans, H.

Author Affiliation: Dept. of Comput. Sci., Glasgow Univ., UK

Journal: Java Report vol.5, no.10 p.60-72

Publisher: 10lcommunications LLC,

Publication Date: Oct. 2000 Country of Publication: USA

CODEN: JREPFI ISSN: 1086-4660

SICI: 1086-4660(200010)5:10L.60:UJOS;1-3

Material Identity Number: F243-2000-005

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: One package that is provided by general-purpose Java implementations is the java.io package. This package can provide a form of object persistence so that a specified subset of the state of a program can outlive the lifetime of the process that created it. This is achieved by serializing an **object** graph into a file on disk via an in-memory **buffer**. Serialization of a graph of **objects** is the process of flattening that graph into a form suitable to be written to disk or passed across a **network**. The reverse operation, deserialization, is the act of taking the data from disk or the **network** and reconstituting a graph of the same shape. I describe how the Java Object Serialization mechanism (JOS) can be used to provide persistence and four areas you need to consider when using it. The article describes the basics of the JOS system. It illustrates problems that arise from having to read and write the entire graph before you can use it. It discusses how the copying of a graph can cause code to fail. Finally, it illustrates problems with making static and transient fields persistent. (8 Refs)

Subfile: C

Descriptors: Java; object-oriented programming; persistent objects

Identifiers: Java object serialization; java.io package; object persistence; in-memory buffer; deserialization; transient fields; static fields

Class Codes: C6110J (Object-oriented programming); C6140D (High level languages); C6120 (File organisation)

Copyright 2000, IEE

15/5/10 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6290720 INSPEC Abstract Number: C1999-08-5220-005

**Title: Design of architecture of programmable stack-based video processor with VHDL**

Author(s): Ju-Hyun Park; Young-Min Kim

Author Affiliation: Electron. & Telecommun. Res. Inst., South Korea

Journal: Journal of the Institute of Electronics Engineers of Korea C vol.36-C, no.4 p.30-44

Publisher: Inst. Electron. Eng. Korea,

Publication Date: April 1999 Country of Publication: South Korea

CODEN: CKONF4 ISSN: 1226-5853

SICI: 1226-5853(199904)36C:4L.30:DAPS;1-2

Material Identity Number: G413-1999-007

Language: Korean Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: The main goal of this paper is to design a high performance SVP (Stack based Video Processor) for **network** applications. The SVP is a comprehensive scheme; 'better' in the sense that it is an optimal selection of previously proposed enhancements of a stack machine and a video processor. This can process effectively object-based video data using a S-RISC (Stack-based Reduced Instruction Set Computer) with a semi-general-purpose architecture having a stack **buffer** for OOP (Object-Oriented Programming) with many small procedures at running programs. And



it includes a vector processor that can improve the MPEG coding speed. The vector processor in the SVP can execute advanced mode motion compensation, motion prediction by half pixel and SA-DCT (Shape Adaptive-Discrete Cosine Transform) of MPEG-4. Absolutors and halfers in the vector processor make this architecture extensive to a encoder. We also designed a VLSI stack-oriented video processor using the proposed architecture of stack-oriented video decoding. It was designed with 0.5  $\mu$ m 3LM standard-cell technology, and has 110 K logic gates and 12 Kbits SRAM internal buffer. The operating frequency is 50 MHz. This executes algorithms of video decoding for QCIF 15 fps (frame per second), maximum rate of VLBV (Very Low Bitrate Video) in MPEG-4. (24 Refs)

Subfile: C

Descriptors: computer architecture; hardware description languages; motion compensation; reduced instruction set computing

Identifiers: programmable stack-based video processor; VHDL; S-RISC; Object-Oriented Programming; Shape Adaptive-Discrete Cosine Transform; motion compensation; motion prediction; vector processor

Class Codes: C5220 (Computer architecture); C6140D (High level languages)

)  
Copyright 1999, IEE

15/5/11 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5997454 INSPEC Abstract Number: C9809-6130M-052

**Title: Retrieval schedules based on resource availability and flexible presentation specifications**

Author(s): Candan, S.; Prabhakaran, B.; Subrahmanian, V.S.

Author Affiliation: Dept. of Comput. Sci. & Eng., Arizona State Univ., Tempe, AZ, USA

Journal: Multimedia Systems vol.6, no.4 p.232-50

Publisher: Springer-Verlag,

Publication Date: July 1998 Country of Publication: Germany

CODEN: MUSYEW ISSN: 0942-4962

SICI: 0942-4962(199807)6:4L:232:RSBR;1-A

Material Identity Number: P899-98004

U.S. Copyright Clearance Center Code: 0942-4962/98/\$2.00+0.20

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: A distributed multimedia document presentation involves retrieval of objects from one or more document servers and their presentation at the client system. The presentation of the multimedia objects has to be carried out in accordance with the specification of temporal relationships between the objects. The retrieval of multimedia objects from the document server(s) is influenced by factors such as temporal specification of **objects** presentations, throughput offered by the **network** service provider, and the **buffer** resources on the client system. Flexibility in the temporal specification of the multimedia document may help in deriving an **object** retrieval schedule that can handle variations in **network** throughput and **buffer** resource availability. We develop techniques for deriving a flexible **object** retrieval schedule for a distributed multimedia document presentation. The schedule is based on flexible temporal specification of the multimedia document using the difference constraints approach. We show how the derived retrieval schedule can be validated and modified to ensure that it can work with the offered **network** throughput and the available buffer resources.

(40 Refs)

Subfile: C

Descriptors: client-server systems; document handling; information retrieval; multimedia computing; scheduling

Identifiers: information retrieval schedules; resource availability; distributed multimedia document presentation; document servers; client server system; temporal relationships; temporal specification; throughput; network service provider; buffer resources; object retrieval; buffer resource availability; difference constraints approach

Class Codes: C6130M (Multimedia); C6150N (Distributed systems software);

C6130D (Document processing techniques)  
Copyright 1998, IEE

15/5/12 (Item 4 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5077650 INSPEC Abstract Number: B9511-6210L-167, C9511-7410F-068

**Title: Message communication facilities for distributed real-time systems based on concurrent object-oriented paradigm**

Author(s): Tanaka, S.; Maruyama, K.; Kubota, M.; Yamada, S.

Author Affiliation: NTT Software Corp., Yokohama, Japan

Journal: Transactions of the Institute of Electronics, Information and Communication Engineers D-I vol.J78D-I, no.8 p.736-45

Publication Date: Aug. 1995 Country of Publication: Japan

CODEN: DTRDES

Language: Japanese Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: The paper describes facilities for message passing between network-wide distributed objects on a distributed processing platform for telecommunication applications, called PLATINA. The interobject communication facilities must have high throughput, low delay, and high reliability. In intranode communication, fixed-size message buffers are allocated in a shared space and only there are capabilities sent to the object. To prevent illegal access to message buffers, a low-overhead capability protection mechanism checks the object's capability. Large size messages can be sent without copy overhead by the copy-on-write mechanism. In internode communication, an internode communication object processes the internode protocol and copies message between nodes. (13 Refs)

Subfile: B C

Descriptors: buffer storage; computer networks; message passing; object-oriented methods; parallel processing; protocols; real-time systems; telecommunication computing

Identifiers: message communication facilities; distributed real-time systems; concurrent object-oriented paradigm; message passing; network-wide distributed objects; distributed processing platform; telecommunication applications; PLATINA; interobject communication facilities; high throughput; low delay; high reliability; intranode communication; fixed-size message buffers; shared space; low-overhead capability protection mechanism; copy-on-write mechanism; internode communication; internode protocol; copies message

Class Codes: B6210L (Computer communications); B6150M (Protocols); C7410F (Communications computing); C5620 (Computer networks and techniques); C5320G (Semiconductor storage); C6110F (Formal methods); C5640 (Protocols); C6150N (Distributed systems software)

Copyright 1995, IEE

15/5/13 (Item 5 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2002 Institution of Electrical Engineers. All rts. reserv.

4731365 INSPEC Abstract Number: B9409-6230F-007, C9409-5620M-020

**Title: Architecture and performance of ATM interworking units**

Author(s): Venieris, I.S.; Sanchez-P, J.-A.; Tsiotsios, E.N.

Author Affiliation: Electr. and Comput. Eng. Dept., Nat. Tech. Univ. of Athens, Greece

p.61-70

Editor(s): Rao, S.

Publisher: IOS Press, Amsterdam, Netherlands

Publication Date: 1994 Country of Publication: Netherlands x+432 pp.

Conference Title: Proceedings of Interworking 94 - 2nd International Symposium on Interworking

Conference Date: 4-6 May 1994 Conference Location: Sophia Antipolis, France

Language: English Document Type: Conference Paper (PA)

Treatment: Theoretical (T)

Abstract: ATM interworking units (AIUs) for data and connection oriented service communication between heterogeneous **networks** are classified according to their relay protocol complexity and possible AIU protocol architectures are defined. The paper evaluates the performance of ATM interworking in terms of quality of the supporting services taking into account traffic characteristics. New schemes for bandwidth and **buffer** management are introduced with the **object** to find a compromise between **network** resource exploitation and service performance. The paper provides useful guidelines for the design of high performance AIUs. (11 Refs)

Subfile: B C

Descriptors: asynchronous transfer mode; B-ISDN; buffer storage; frequency allocation; internetworking; metropolitan area networks; protocols; telecommunication traffic

Identifiers: ATM interworking units; AIU performance; AIU architecture; connection oriented service communication; data oriented service communication; relay protocol complexity; AIU protocol architectures; traffic characteristics; buffer management; bandwidth management; service performance

Class Codes: B6230F (Integrated switching and transmission systems); B6210M (ISDN); B6210L (Computer communications); B6150M (Protocols); C5620M (Metropolitan area networks); C5640 (Protocols)

15/5/14 (Item 6 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

4590285 INSPEC Abstract Number: C9403-5260B-069

Title: **Object-oriented computational networks for computer vision applications**

Author(s): Olsson, L.; Winroth, H.

Author Affiliation: Dept. of Numer. Anal. & Comput. Sci., R. Inst. of Technol., Stockholm, Sweden

Conference Title: Technology of Object-Oriented Languages and Systems. TOOLS 10. Proceedings of the Tenth International Conference p.223-33

Editor(s): Magnusson, B.; Meyer, B.; Perrot, J.-F.

Publisher: Prentice Hall, Hemel Hempstead, UK

Publication Date: 1993 Country of Publication: UK 351 pp.

ISBN: 0 13 097114 6

Conference Date: 8-11 March 1993 Conference Location: Versailles, France

Language: English Document Type: Conference Paper (PA)

Treatment: Applications (A); Practical (P)

Abstract: Two tools for building continuously operating and distributed applications are described. MNT is a toolkit for building computational **networks**, which consist of connected and independently executing agents called modules. Modules pass data to each other via communication channels. The MNT communication is based on XOR, which facilitates the movement of **objects** between different address spaces via files, pipes or shared memory **buffers**. XOR provides a protocol by which **objects** can be described in an implementation-language independent way. (12 Refs)

Subfile: C

Descriptors: computer vision; object-oriented programming; protocols; software tools

Identifiers: object oriented computational networks; computer vision; MNT; toolkit; communication channels; XOR; files; pipes; shared memory buffers; protocol

Class Codes: C5260B (Computer vision and picture processing); C5640 (Protocols); C6110J (Object-oriented programming); C6115 (Programming support)

15/5/15 (Item 7 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

4519025 INSPEC Abstract Number: B9312-6210C-028, C9312-7410F-093

**Title:** An object-oriented relational management information base  
**Author(s):** Chi-Chun Lo; Chin-Sheng Wen  
**Author Affiliation:** Inst. of Inf. Manage., Nat. Chiao-Tung Univ., Taiwan, China  
**Conference Title:** ICCT '92. Proceedings of 1992 International Conference on Communication Technology p.22.03/1-6 vol.2  
**Publisher:** Int. Acad. Publishers, Beijing, China  
**Publication Date:** 1992 **Country of Publication:** China 2 vol.(xxviii+698+xxviii+594) pp.  
**Conference Sponsor:** CIE; CIC; Tsinghua Univ.; IEEE  
**Conference Date:** 16-18 Sept. 1992 **Conference Location:** Beijing, China  
**Language:** English **Document Type:** Conference Paper (PA)  
**Treatment:** Practical (P)  
**Abstract:** **Network** management activities require an extensive information base and a set of associated data manipulation tools. The management information base (MIB) model has been developed by the International Standards Organization (ISO). MIB is the repository of **network** management data. In the ISO model, MIB is generally viewed as an object-oriented database (OODB), and the usual semantics of object orientation apply. The authors propose an object-orientation MIB based on the existing relational database management system (RDBMS) technology. The basic idea is to **buffer** the relevant **object** data which are managed by an OODB process running in the memory, and store them back to the relational database as needed. One can achieve quick access to object data while storing them in the relational database to acquire data persistence. Applications are transparent to the services provided by the relational database management system being used. The object-oriented relational MIB proposed provides a framework of building a general-purpose OODB. (20 Refs)  
**Subfile:** B C  
**Descriptors:** object-oriented databases; open systems; relational databases; telecommunication network management; telecommunications computing  
**Identifiers:** telecommunication network management; open system; object-oriented relational management information base; MIB; ISO model; general-purpose OODB  
**Class Codes:** B6210C (Network management); C7410F (Communications); C6160D (Relational DBMS); C6160J (Object-oriented databases)

15/5/16 (Item 8 from file: 2)  
 DIALOG(R)File 2:INSPEC  
 (c) 2002 Institution of Electrical Engineers. All rts. reserv.

04264853 INSPEC Abstract Number: B9212-6150C-025  
**Title:** Policing and call admission problems in ATM networks  
**Author(s):** Castelli, P.; Cavallero, E.; Tonietti, A.  
**Author Affiliation:** CSELT, Torino, Italy  
**Conference Title:** Teletraffic and Datatraffic in a Period of Change. ITC-13. Proceedings of the Thirteenth International Teletraffic Congress p.847-52  
**Editor(s):** Jensen, A.; Iversen, V.B.  
**Publisher:** North-Holland, Amsterdam, Netherlands  
**Publication Date:** 1991 **Country of Publication:** Netherlands xlviii+1101 pp.  
**ISBN:** 0 444 88666 4  
**Conference Sponsor:** Alcatel-Kirk; Bang & Olufsen; Copenhagen Telephone Co.; et al  
**Conference Date:** 19-26 June 1991 **Conference Location:** Copenhagen, Denmark  
**Language:** English **Document Type:** Conference Paper (PA)  
**Treatment:** Theoretical (T)  
**Abstract:** The authors present an analysis of the two control problems which can be identified in ATM **networks**, i.e. call admission and source policing. Regarding the call admission problem, they assume that it is possible to evaluate separately cell scale losses and burst scale losses, the first one being the **object** of the **buffer** dimensioning problem, the second one concerning the call admission control. They evaluate a simple

procedure for the call admission problem, based on a characterization of the traffic by two parameters: the peak bit rate and the burstiness. Regarding the source policing problem, they present an analysis of the 'leaky bucket' device, based on a fluid flow approximation. The conclusions are that, while the leaky bucket can easily control the peak bit rate, difficulties arise in controlling the mean bit rate (because of the long time required) and the burst duration (because of the poor selectivity). Moreover the burst length distribution has a strong influence on performance. (14 Refs)

Subfile: B

Descriptors: time division multiplexing

Identifiers: ATM networks; cell scale losses; burst scale losses; buffer dimensioning problem; call admission control; peak bit rate; source policing; leaky bucket; mean bit rate; burst duration; burst length distribution

Class Codes: B6150C (Switching theory)

15/5/17 (Item 1 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

(c) 2002 Info. Today Inc. All rts. reserv.

00580087 00WJ03-002

**Passing plain C++ objects via COM**

Samarov, Steve

Windows Developer's Journal , March 1, 2000 , v11 n3 p19-28, 7 Page(s)

ISSN: 1083-9887

Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Shows how to use the marshalling process to make ordinary C++ objects remotable, making it possible to pass 'plain' C++ object references to COM interfaces and even allowing one to share ordinary C++ objects across machine boundaries. Indicates that user marshal is an application configuration file type attribute that one can use to define a more efficient way to marshal data across a **network**. Specifies that one must provide custom functions to marshal a C++ **object** via a string, which are used to request adequate **buffer** size, correctly serialize, and reconstruct the **objects**. Provides an example messaging utility that lets coworkers exchange text messages over the office **network**. Attention is given to the COM runtime on the receiving computer launching the same application as a COM server, copying the message from the edit boxes to the protected data members, and using a modeless dialog. Includes six code listings. (jon)

Descriptors: Object-oriented; Object-oriented Programming; C Programming Language; Networks; Messaging

15/5/18 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

02399062 JICST ACCESSION NUMBER: 95A0784514 FILE SEGMENT: JICST-E

**Distributed Time Management Method for Interconnection Networks Simulation.**

SUGINO YASUAKI (1); SUEYOSHI TOSHINORI (1)

(1) Kyushu Inst. of Technol., Comput. Sci. and Syst. Eng.

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report (Institute of Electronics, Information and Communication Engineers), 1995, VOL.95,NO.210(CPSY95 50-64), PAGE.47-54, FIG.15, TBL.1, REF.9

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:65.012.122

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: This study focus on an efficient distributed time management method in order to realize high speed parallel distributed event simulation on parallel computers or distributed computing environments.

In this study, an interconnection **network** model which can be modeled as an **object** with a bounded **buffer** is adopted as the main evaluation model, and a prototype of general purpose parallel distributed event simulator is used as the test environment. In this paper, to verify the features of the chosen interconnection **network** model, we compare the logical circuit and queue of the existing models in parallel distributed event simulation, and study the costs to avoid time contradictions on a distributed environment. We evaluate our prototype simulator based on the conservative method which is one of distributed time management techniques, and obtained promising results. (author abst.)

DESCRIPTORS: computer simulation; discrete time system; decentralized management; parallel computer; parallel processing; network; interconnection; simulation model; discrete event simulation

BROADER DESCRIPTORS: computer application; utilization; simulation; discrete system; system; management; digital computer; computer; hardware; treatment; connection; model

CLASSIFICATION CODE(S): JE11000H

15/5/19 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

02024495 JICST ACCESSION NUMBER: 94A0195216 FILE SEGMENT: JICST-E

**Network Architecture in TAO/SILENT.**

MURAKAMI KEN'ICHIRO (1)

(1) Nippon Telegraph & Telephone Corp., Basic Res. Labs.

Joho Shori Gakkai Kenkyu Hokoku, 1994, VOL.94,NO.3(SYM-72), PAGE.25-32, FIG.9, REF.7

JOURNAL NUMBER: Z0031BAO ISSN NO: 0919-6072

UNIVERSAL DECIMAL CLASSIFICATION: 681.325/.326.009.16 681.3.053

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: This paper describes a **network** architecture built on top of the TAO language and the symbol processing machine SILENT. The TAO/SILENT system is a dedicated real-time symbolic processing kernel which applies AI to real world problems. The **network** system designed is based on the connection oriented implementation model employing object oriented programming paradigm. On a **network** stream **object**, several processes run simultaneously and perform operations on its packet **buffer**. The **network** system improves its performance by a packet prediction technique, a memory access and process switch suppression technique, and a shared **buffer** implemented by pipelines stream **objects**. In terms of the hardware, **network** interfaces are controlled directly by the SILENT CPU. This results in reduced processing overhead compared to indirect operations through Front-End-Processor. (author abst.)

DESCRIPTORS: symbol processing; computer architecture; computer network; LISP; list processing language; object-oriented language; message transmission; packet switching; high level language machine

BROADER DESCRIPTORS: information processing; treatment; computer system(architecture); method; communication network; information network; network; high level language; programming language; formal language; language; application oriented language; communication system; store-and-forward switching; communication exchanging; exchange; switching; special purpose processor; hardware

CLASSIFICATION CODE(S): JC04030Y; JE03000Q

15/5/20 (Item 3 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

01521598 JICST ACCESSION NUMBER: 92A0443702 FILE SEGMENT: JICST-E

**A Lightweight Capability Protection Mechanism for Object-Oriented Switching**

**Programs.**

YAMADA SHIGEKI (1); MARUYAMA KATSUMI (1)

(1) Nippon Telegraph & Telephone Corp.

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku (IEIC Technical Report  
(Institute of Electronics, Information and Communication Engineers),  
1992, VOL.92, NO.75 (SSE92 6-13), PAGE.37-42, FIG.9, TBL.1, REF.8

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 621.395.33/.38 681.3:654

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: Communication nodes, like switching nodes and service control points in telecommunication **networks** should incorporate distributed processing functions to provide **network** -wide advanced services. For these distributed processing nodes, the distributed object-oriented models and programs are natural and suitable, in which messages are the single and unified interface to all the objects, wherever the objects are located in the **network**. This paper describes a lightweight capability protection mechanism, OCAVE for distributed object-oriented switching programs to achieve high reliability, while keeping high performance. In the proposed protection mechanism, capability schemes are applied only to message **buffer objects** in the shared address space of each node, and capabilities are checked in parallel with memory accesses, resulting in no performance penalty. Calculation reveals that the OCAVE can achieve good error detection probability, leading to high reliability of distributed processing nodes. (author abst.)

DESCRIPTORS: object oriented programming; application program; system reliability; distributed processing; virtual storage system; storage management; error detection; communication network; exchange control system

BROADER DESCRIPTORS: computer programming; computer program; software; reliability(ratio); reliability(property); performance; degree; treatment; storage system; method; management; error control; control; detection; information network; network; control system(computer)

CLASSIFICATION CODE(S): ND11020E; JC03000K

15/5/21 (Item 1 from file: 144)

DIALOG(R) File 144:Pascal

(c) 2002 INIST/CNRS. All rts. reserv.

13648917 PASCAL No.: 98-0355687

**Retrieval schedules based on resource availability and flexible presentation specifications**

CANDAN K S; PRABHAKARAN B; SUBRAHMANIAN V S

Department of Computer Science and Engineering, Arizona State University, Box 875406, Tempe, AZ 85287-5406, United States; Department of Information Systems and Computer Science, National University of Singapore, Singapore 119260, Singapore; Department of Computer Science, Institute for Advanced Computer Studies & Institute for Systems Research, University of Maryland, College Park, MD 20742, United States

Journal: Multimedia systems, 1998, 6 (4) 232-250

ISSN: 0942-4962 Availability: INIST-26256; 354000072344880020

No. of Refs.: 40 ref.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: Germany

Language: English

A distributed multimedia document presentation involves retrieval of objects from one or more document servers and their presentation at the client system. The presentation of the multimedia objects has to be carried out in accordance with the specification of temporal relationships between the objects. The retrieval of multimedia objects from the document server(s) is influenced by factors such as temporal specification of **objects** presentations, throughput offered by the **network** service provider, and the **buffer** resources on the client system. Flexibility in the temporal specification of the multimedia document may help in deriving





an object retrieval schedule that can handle variations in network throughput and buffer resource availability. In this paper, we develop techniques for deriving a flexible object retrieval schedule for a distributed multimedia document presentation. The schedule is based on flexible temporal specification of the multimedia document using the difference constraints approach. We show how the derived retrieval schedule can be validated and modified to ensure that it can work with the offered network throughput and the available buffer resources.

English Descriptors: Database systems; Flexibility; Channel capacity;  
Buffer system; Availability; Multimedia; Document retrieval; Distributed database; Search algorithm

French Descriptors: Systeme base donnee; Flexibilite; Capacite canal;  
Systeme tampon; Disponibilite; Multimedia; Recherche documentaire; Base donnee repartie; Algorithme recherche

Classification Codes: 001D04A05D; 001D02B07D

Copyright (c) 1998 INIST-CNRS. All rights reserved.

15/5/22 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2002 Inst for Sci Info. All rts. reserv.

06013611 Genuine Article#: XP139 Number of References: 202

**Title: Distributed multimedia systems**

Author(s): Li VOK (REPRINT) ; Liao WJ

Corporate Source: UNIV HONG KONG, DEPT ELECT & ELECT ENGN/HONG KONG//HONG KONG/ (REPRINT); UNIV SO CALIF, INST COMMUN SCI, DEPT ELECT ENGN/LOS ANGELES//CA/90089

Journal: PROCEEDINGS OF THE IEEE, 1997, V85, N7 (JUL), P1063-1108

ISSN: 0018-9219 Publication date: 19970700

Publisher: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC, 345 E 47TH ST, NEW YORK, NY 10017-2394

Language: English Document Type: REVIEW

Geographic Location: HONG KONG; USA

Subfile: CC ENGI--Current Contents, Engineering, Computing & Technology

Journal Subject Category: ENGINEERING, ELECTRICAL & ELECTRONIC

**Abstract:** A distributed multimedia system (DMS) is an integrated communication, computing and information system that enables the processing, management, delivery, and presentation of synchronized multimedia information with quality-of-service guarantees. Multimedia information may include discrete media data, such as text, data, and images, and continuous media data, such as video and audio. Such a system enhances human communications by exploiting both visual and aural senses and provides the ultimate flexibility in work and entertainment, allowing one to collaborate with remote participants, view movies on demand access on-line digital libraries from the desktop, and so forth. In this paper, we present a technical survey of a DMS. We give an overview of distributed multimedia systems, examine the fundamental concept DBS of digital media, identify the applications, and survey the important enabling technologies.

**Descriptors--Author Keywords:** digital media ; distributed systems ; hypermedia ; interactive TV ; multimedia ; multimedia communications ; multimedia systems ; video conferencing

**Identifiers--KeyWord Plus(R):** VIDEO DIAL TONE; CONTINUOUS MEDIA; SYNCHRONIZATION; STORAGE; INFORMATION; NETWORKS; SUPPORT; DEMAND; MODEL; KNOWLEDGE

**Research Fronts:** 95-0490 007 (OPEN DISTRIBUTED HYPERMEDIA; HYPERTEXT MODEL; MULTIMEDIA SERVICES)

95-0913 004 (MULTIMEDIA STORAGE SERVERS; OPERATING SYSTEM SUPPORT; CONTINUOUS MEDIA DISK SCHEDULING; REAL-TIME RETRIEVAL)

95-0393 002 (VIDEO COMPRESSION; VLSI IMPLEMENTATION OF THE INVERSE DISCRETE COSINE TRANSFORM; LOW-BIT-RATE SEGMENTATION-BASED IMAGE SEQUENCE CODING; VECTOR QUANTIZATION)

95-0604 001 (ARRAYED-WAVE-GUIDE GRATING MULTIPLEXER; ACOUSTOOPTIC

TURNER JS, 1986, V2 P8, IEEE COMMUN MAG  
VAZIRGIANNIS M, 1993, V36, P78, COMPUT J  
VIN HM, 1995, V18, P192, COMPUT COMMUN  
VIN HM, 1993, V11, P153, IEEE J SEL AREA COMM  
VOGEL A, 1995, P10, IEEE MULTIMEDIA SUM  
WAHL T, 1994, P538, P INT C MULTIMEDIA C  
WALLACE GK, 1991, V34, P30, COMMUN ACM  
WATABE K, 1991, V9, P531, IEEE J SEL AREA COMM  
WEISS R, 1995, P12, IEEE MULTIMEDIA SPR  
WILLIAMS N, 1994, V17, P199, COMPUT COMMUN  
WOO M, 1994, V8, P52, IEEE NETWORK  
ZAPPALA D, 1996, RSVP PROTOCOL OVERVI  
ZARROS PN, 1996, V3, P1, ACM SPRINGER VERLAG  
ZHANG L, 1993, P8, IEEE NETWORK SEP

15/5/23 (Item 1 from file: 99)

DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs  
(c) 2002 The HW Wilson Co. All rts. reserv.

1311961 H.W. WILSON RECORD NUMBER: BAST96015494

**Buffer management issues in the implementation of fast interprocess communication**

Kougiouris, Panos; Hamilton, Graham

Software: Practice & Experience v. 26 (Feb. '96) p. 195-211

DOCUMENT TYPE: Feature Article ISSN: 0038-0644 LANGUAGE: English

RECORD STATUS: Corrected or revised record

ABSTRACT: A study of **buffer** management from the perspective of Spring **object** invocation machinery interaction is discussed. The approach consists of building a cross-domain object invocation mechanism that is conscious about memory usage. Use is made of the Spring system, which is a distributed computing environment that operates on a **networked** collection of computers, with each Spring system based on a microkernel, or nucleus, which is designed to support fast and secure cross address-space object invocations. In this setup, servers operating as user-mode domains provide most of the usual operating system services; fast, secure, and space-efficient cross-domain invocation is very important in the Spring system. It is concluded that careful buffer management can substantially reduce the quantity of memory needed for IPC buffers at only a minor reduction in average RPC round-trip time.

DESCRIPTORS: Buffer storage; Memory management (Computer science);  
Distributed data processing;

15/5/24 (Item 1 from file: 266)

DIALOG(R)File 266:FEDRIP

Comp & dist by NTIS, Intl Copyright All Rights Res. All rts. reserv.

00177954

IDENTIFYING NO.: 0121726 AGENCY CODE: NSF

ITR/IM+AP+SI+PR: Exploring the Environment in Time: Wireless Networks & Real-Time Management

PRINCIPAL INVESTIGATOR: Orcutt, John A

PERFORMING ORG.: University of California-San Diego Scripps Inst of Oceanography, Inst. of Geophysics & Planetary Physics, La Jolla, CA 92093-0225

PROJECT MONITOR: Itsweire, Eric C.

SPONSORING ORG.: National Science Foundation, OCE, 4201 Wilson Boulevard, Arlington, Virginia 22230

DATES: 20011001 TO 20040930 FY : 2001 FUNDS: \$7,032,316 (7000000)

SUMMARY: 0121726 Orcutt This project seeks to integrate disparate efforts in both the Earth sciences and information technology to develop a model approach for modern data collection and integration. The approach is to build upon existing sensor **networks** and wireless communications to develop the hardware and software needed for supporting research of the future and to make information available for emergency response, informed decision-making, outreach and education, and enhanced scientific discovery.

In particular the existing southern California scientific and educational wireless network will be extended along the coast from San Diego to Santa Barbara and to the oceans beyond the Channel Islands. Because of southern California's reliance on water from the Sierra snow pack and the dependence of this source of water on climate, we will extend the network to include Yosemite National Park. Using this test bed the requirements and utility of wireless networks for collecting and streaming environmental sensor data in real-time will be demonstrated. Multidisciplinary data sets (e.g. earthquake, ocean current, hydrometeorological, and ecological) will be integrated to advance our understanding and management of coastal, ocean, riparian, and terrestrial geophysical phenomena and ecosystems in Southern California and well off shore. The software tools which must be developed for this integration do not exist, although limited prototype systems are available. In particular, existing concepts in object ring buffers (ORB) for collecting disciplinary data to virtual ORBs (VORB) for managing multiple connections to multiple field sensors will be extended. These VORBs will not only provide data to multiple users in real time, but will provide interfaces with archival ORB and more traditional databases. Many of these interactions will be mediated through XML wrappers which will provide the basis for data discovery. A rule-based programmable interface will be developed to dynamically reconfigure and prioritize data capture and analysis from this multiplicity of sensor networks. This approach should be scalable as network speeds increase and data volumes grow, likely geometrically. Funding is provided under the Information Technology Research Initiative.

15/5/25 (Item 1 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2002 FIZ TECHNIK. All rts. reserv.

00718661 I93092286230

**Titel japanisch**

(Organisation eines netzwerktopologieunabhaengigen Routers fuer eine parallele objektorientierte Totalarchitektur)

(Organization of a network-topology independent router for a parallel object-oriented total architecture A-NET)

Yoshinaga, T; Mogi, H; Sasaki, S; Baba, T

Dept. of Inf. Sci., Utsunomiya Univ., Japan

Transactions of Information Processing Society of Japan, v34, n4, pp648-657, 1993

Document type: journal article Language: Japanese

Record type: Abstract

**ABSTRACT:**

A router for a parallel object-oriented machine was designed. The A-NET router provides two functions, that is, message routing and dynamic object allocation, in a network-topology independent fashion using a programmable communication controller. It supports both adaptive virtual cut-through packet switching and the circuit-switching transfer of an object code. It consists of several hardware blocks, a message-sender, a message-receiver, a PE interface circuit, a packet buffer, 6 ports to connect with other routers, and a port for a host computer. These blocks have their own state machines and are connected to a crossbar network, enabling them to exchange data simultaneously.

DESCRIPTORS: PACKET SWITCHING; PARALLEL MACHINES; NETWORK TOPOLOGY; COMPUTER ARCHITECTURE; MULTIPROCESSING SYSTEMS; MASSIVELY PARALLEL MACHINES; OBJECT ORIENTED PROGRAMMING; DISTRIBUTED COMPUTING; PARALLEL ARCHITECTURES

IDENTIFIERS: STORAGE ALLOCATION; PARALLEL OBJECT ORIENTED TOTAL ARCHITECTURE A NET; PARALLEL OBJECT ORIENTED MACHINE; A NET ROUTER; MESSAGE ROUTING; DYNAMIC OBJECT ALLOCATION; NETWORK TOPOLOGY INDEPENDENT FASHION; PROGRAMMABLE COMMUNICATION CONTROLLER; ADAPTIVE VIRTUAL CUT THROUGH PACKET SWITCHING; CIRCUIT SWITCHING TRANSFER; OBJECT CODE; HARDWARE BLOCKS; MESSAGE SENDER; MESSAGE RECEIVER; PE INTERFACE CIRCUIT; PACKET BUFFER; CROSSBAR NETWORK; OBJECT ORIENTED METHODS; Router; objektorientierter Rechner; Topologie

Set	Items	Description
S1	2279	XML OR EXTENSIBLE() (MARKUP OR MARK()UP)
S2	5446	HTML OR SGML OR XHTML OR DHTML OR VRML OR VIRTUAL()REALITY- ( )MODELING()LANGUAGE OR (MARKUP OR MARK()UP) ( )LANGUAGE? ? OR - (STRUCTURED OR WEB) (1W) (FILE OR FILES OR DOCUMENT? ?)
S3	6	PARS?(3N) (PART? ? OR PARTIAL? OR PORTION? OR PIECE?? OR PI- ECEMEAL OR SECTION? OR FRAGMENT?? OR SEGMENT?? OR BLOCK? ? OR ELEMENT? ? OR UNIT OR UNITS OR COMPONENT? ?) (3N) (DOCUMENT? ? - OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S4	1815	S1:S2(3W) (DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S5	13747	(PART? ? OR PARTIAL? OR PORTION? ? OR PIECE? ? OR PIECEMEAL OR SECTION? ? OR FRAGMENT? ? OR SEGMENT? ?)
S6	5	S4(3N)S5(3N) (CONSTRUCT? OR BUILD? OR PREPAR? OR ASSEMBL? OR CREAT? OR MAK??? OR FORM??? OR FORMATION? ? OR ARRANG? OR OR- GANIZ? OR ORGANIS? OR PUT????()TOGETHER)
S7	0	PARS?(5N) (REAL()TIME OR ADAPTIV? OR ON(1W)FLY OR GRADUAL? - OR AT(1W)TIME OR AFTER(1W) (OTHER OR NEXT) OR LITTLE(1W)LITTLE- ( ) (5N) (DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE - OR STRUCTURE)
S8	4	S1:S2 AND S3
S9	9	S8 OR S6

9/5/1

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2002 Info.Sources Inc. All rts. reserv.

01765651 DOCUMENT TYPE: Product

PRODUCT NAME: STILO SGML Document Generator (765651)

Stilo Technology Ltd (665665)  
Empire House Mount Stuart Sq  
Cardiff, Wales, CF1 6DN United Kingdom  
TELEPHONE: ( ) 029-20483530

RECORD TYPE: Directory

CONTACT: Sales Department

STILO SGML Document Generator from Stilo Technology allows users to build documents in Standard Generalized Markup Language ( SGML ), a standard system of electronic publishing. The software ensures that what is entered is accurate and fully compliant with SGML specifications. STILO SGML Document Generator also reduces the number of keystrokes that users must enter to build an SGML document. Users do not need to be familiar with SGML to build a document. STILO checks the text file and related information such as the DTDs ( document type definitions). It can parse partial documents for errors, check the SGML Declaration, and reduce unnecessary markups. STILO SGML Document Generator's built-in text editor offers access to comments, WYSIWYG displays, hard-copy output options, and optional display of SGML tags. Users can enter tables and delimited text and can select styles. STILO SGML Document Generator can provide a snapshot, or icon-based diagram, of the document's structure. Users navigate an active document using graphical, intuitive tools. STILO also supports the concurrent updating of an SGML document by more than one author. The software can also build one document from several input files, which is useful when creating a multi-author document. The number of input files is limited only by system resources. When a document is complete, it can be output in STILO, SMGL text, or HTML format files.

DESCRIPTORS: Electronic Publishing; Text Editors; Language Processors;  
Standards; Authoring Systems; Document Generators; WYSIWYG; Technical  
Publishing

HARDWARE: IBM PC & Compatibles  
OPERATING SYSTEM: Windows; Windows NT/2000  
PROGRAM LANGUAGES: SGML; HTML  
TYPE OF PRODUCT: Micro  
POTENTIAL USERS: Cross Industry, Publication Groups  
PRICE: Available upon request; Internet demo available

OTHER REQUIREMENTS: Win 9x+ required  
REVISION DATE: 000218

9/5/2

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2002 Info.Sources Inc. All rts. reserv.

01241334 DOCUMENT TYPE: Product

PRODUCT NAME: C-DOC Professional (241334)

Software Blacksmiths Inc (473812)  
6064 St Ives Way  
Mississauga, ON L5N 4M1 Canada  
TELEPHONE: (905) 858-4466

RECORD TYPE: Directory

CONTACT: Sales Department

SoftWare BlackSmiths' C-DOC Professional (TM) is an automatic C and C++ software documentation tool. Employing C-DOC Professional, managers and programmers can create or modify application product information. C-DOC Professional can also be used to reverse engineer poorly documented code or programs. The software can create JavaVM or WebBrowser function hierarchy trees. C-DOC Professional works with any C, C++, or Java (TM) compiler. **HTML** reports offer users clickable navigation. C-DOC Professional's CLIST (TM) module can reformat source programs into standard formats, create action diagrams that map control logic structures, and number listings for streamlined referencing. C-DOC Professional's CCALL (TM) **component parses** programs to find functions, creates **tree** diagrams, produces table of contents, and generates cross- references. CCMT (TM) creates, inserts, and updates function comment blocks. C-DOC Professional's CMETRIC (TM) module calculates path complexity and quality for functions, and the CREF (TM) module shows identifiers. C-DOC Professional's JavTREE (TM) is a Java-based tree viewer. The CHELP (TM) module offers configuration, reporting, and output option controls. Additionally, the system sends data to ASCII, Epson/LaserJet-compatible printers, and RTF, and **HTML** files. Overall, C-DOC Professional streamline documentation, debugging, and maintenance processing. SoftWare BlackSmiths offers a demonstration version of C-DOC Professional that can be downloaded from the company's Web site.

DESCRIPTORS: Documentation Aids; Software Testing; Program Development; Technical Publishing; Language Processors; Cross Reference Utilities

HARDWARE: IBM PC & Compatibles

OPERATING SYSTEM: Linux; Windows NT/2000; Windows; OS/2; MS-DOS

PROGRAM LANGUAGES: C; C++; Java

TYPE OF PRODUCT: Micro

POTENTIAL USERS: C/C++ Programmers, Documentation, Java Developers

PRICE: \$199 via download; \$299--Professional Edition via download.  
Internet demo available.

OTHER REQUIREMENTS: 80386+ CPU; DOS 3.3+ or Intel Linux or Win 3.1+ or OS/2 2.x+ required

REVISION DATE: 020424

9/5/3

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.

(c)2002 Info.Sources Inc. All rts. reserv.

00126715

DOCUMENT TYPE: Review

PRODUCT NAMES: XML-DSig (843814)

TITLE: Digital Signature Standard Gets Closer With Industry Standard

AUTHOR: Lewis, Jamie

SOURCE: InternetWeek, v833 p39(1) Oct 16, 2000

ISSN: 0746-8121

HOME PAGE: <http://www.internetwk.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

The World Wide Web Consortium's (W3C's)/Internet Engineering Task Force's (IETF's) XML-DSig standard is close to being a reality. It will provide a flexible, general purpose digital signature format. Applications can use it to e-sign any content type, whether XML or not. Multiple items can be signed locally or remotely, as a linked group. These abilities are important, since a total transaction can include more than one message or document. XML-DSig also permits applications to sign underlying data and XML stylesheets and other transformations inherent in rendering documents on the screen. Therefore, users will be able to e-sign what they can view. People can also countersign, witness, or notarize signatures of others.

Because XML-DSig is application neutral, can link signatures with XML content, and has a flexible format, XML-DSig could make digital signature applications commonplace. XML-DSig can also surpass current signature standards, including Secure/MIME (S/MIME), to provide an all-purpose signature standard useful to many applications. XML-DSig provides the defined link between public key cryptography and XML. It also offers a humanly readable digital signature that, when part of an XML document, could make digital signatures understandable.

COMPANY NAME: Vendor Independent (999999)  
SPECIAL FEATURE: Charts  
DESCRIPTORS: Communications Standards; Digital Signatures; E-Commerce;  
Internet Security; XML  
REVISION DATE: 20010228

9/5/4

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2002 Info.Sources Inc. All rts. reserv.

00121704 DOCUMENT TYPE: Review

PRODUCT NAMES: Zinnote (710261); DB2 Intelligent Data Miner (653934);  
Clementine (517771); Visualizer (753475)

TITLE: Visualization Software: Looking For A Market  
AUTHOR: Chabrow, Laura  
SOURCE: Information Week, v772 p112(3) Feb 7, 2000  
ISSN: 8750-6874  
HOMEPAGE: <http://www.informationweek.com>

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

Positive Support Review's Zinnote, Quansoo Group's Business Continuum, IBM's Intelligent Data Miner, SPSS' Clementine, and Cognos' Visualizer are visualization packages that can improve desktop data analysis results in multiple ways. For instance, graphical imagery can point out the important features of data, including largest and smallest profit margins, revenue comparisons, and availability of employee skills. Artisan Entertainment, for instance, uses bar and line charts to show sales over a period of time to improve traditional text sales; Artisan also creates special promotion reports for its president and marketing managers. Artisan distributes approximately 6,000 video and DVD titles to retailers and video stores, and creates reports with Zinnote. Zinnote is the most straightforward type of shrink-wrapped product available and runs only under Windows. Zinnote creates reports to be presented as Microsoft Word documents or Web pages, and does not add interactive or drill-down features. Reports can be e-mail attachments or in HTML format for Web pages. More advanced visualization tools are often part of data mining products, including IBM Intelligent Miner, SAS Institute's Data Mining, and SPSS Clementine. Cognos Visualizer is included with online analytical processing (OLAP) tools, and Business Continuum displays two companies as one for companies preparing for a merger. Business Continuum can show the most universal factors merged for the functional areas of companies, including, for example, salaries, positions, work locations, and skills for human resources departments.

COMPANY NAME: Positive Support Review Inc (PSR) (647853); IBM Corp  
(351245); SPSS Inc (016233); Cognos Corp (027294)  
DESCRIPTORS: Business Planning; Data Mining; Decision Support Systems;  
Marketing Information; Sales Analysis  
REVISION DATE: 20020703

9/5/5

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2002 Info.Sources Inc. All rts. reserv.

00105692 DOCUMENT TYPE: Review

PRODUCT NAMES: CGI (836427); HTML (835277)

TITLE: Template-Driven Web Pages

AUTHOR: Johansen, Jay

SOURCE: Dr Dobb's Journal, v22 n11 p74(6) Nov 1997

ISSN: 1044-789X

HOME PAGE: <http://www.ddj.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

Common Gateway Interface (CGI) and Hypertext Markup Language (HTML) are technologies highlighted in a discussion of template-based World Wide Web pages. A sample application, dynadd, is described that uses template language and parsing methods developed to prevent the need for creating a different CGI program for updating each specific page. Four files are used in dynadd (which is available for downloading): an HTML form in which updates are provided, including hidden values indicating the names of the remaining files; a comma-delimited ASCII file that retains data supplied by buyers; an output-file template, which includes some pseudotags and pseudoentities that govern where data from the data file is inserted in the fixed text, and in what format data is used; and an HTML output file created by dynadd from the template file and the raw data. The template file is a conventional HTML file with some special markup tags and entities. Text, including markup, not known to the program is sent to the output file, and HTML is in no way validated or processed. Therefore, any legal HTML, including future tags and extensions, can be successfully formatted. Topics discussed include: structure, the template, parsing, expression parser, tying pieces together, and security.

COMPANY NAME: Vendor Independent (999999)

SPECIAL FEATURE: Charts Program Listings

DESCRIPTORS: Authoring Systems; CGI; Electronic Publishing; HTML; Internet Utilities; Program Development; Templates; Web Site Design

REVISION DATE: 20000430

9/5/6

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.

(c)2002 Info.Sources Inc. All rights reserved.

00104035 DOCUMENT TYPE: Review

PRODUCT NAMES: XML (837709)

TITLE: XML Offers Standard Way Of Extending HTML

AUTHOR: Kiely, Don

SOURCE: Information Week, v652 p8A(3) Oct 13, 1997

ISSN: 8750-6874

HOME PAGE: <http://www.informationweek.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

HTML is being replaced by a more flexible data format that can provide more sophisticated World Wide Web applications. This data format is XML, or eXtensible Markup Language. To supplement HTML, many proprietary technologies such as ActiveX have been placed into use. Even Java, an open standard programming language, has made advanced, complex programming necessary to deliver World Wide Web sites with vitality. XML is a type of Standard Generalized Markup Language (SGML) that aims to create a class of objects called XML documents that can be used in object-oriented programs for World Wide Web design. The result will be easier and quicker Web



design. The distinct goals of XML are specifically designed to make this a standard so that all applications can easily use one common **format** to transfer data. **XML documents** will consist of three **parts**: a document with data and markup tags, a Document Type Declaration (DTD) to define the documents structure, and stylesheets for formatting. It is hoped that XML will bring to application design the simplicity that once was hoped for from SGML. XML will not replace HTML, however. HTML is intended for document display; XML is used to define a document's structure. It may also be used with Java for more advanced applications. The XML specification is not yet finished, but already products such as Microsoft's Channel Definition Format (CDF) and JavaSoft's Java Speech Markup Language specification have employed it.

COMPANY NAME: Vendor Independent (999999)  
SPECIAL FEATURE: Charts Program Listings  
DESCRIPTORS: Authoring Systems; Electronic Publishing; Internet Utilities;  
SGML; Standards; Web Site Design; XML  
REVISION DATE: 20000430

9/5/7

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2002 Info.Sources Inc. All rts. reserv.

00098397 DOCUMENT TYPE: Review

PRODUCT NAMES: HAHTsite 1.0 Windows & Windows 95 (632864)

TITLE: A HAHTsite for Sore Eyes  
AUTHOR: Yegulalp, Serdar  
SOURCE: Windows Magazine, v8 n2 pl62(1) Feb 1997  
ISSN: 1060-1066  
HOMEPAGE: <http://www.winmag.com>

RECORD TYPE: Review  
REVIEW TYPE: Review  
GRADE: A

HAHT Software's HAHTsite IDE 1.0, an inventive application with a unique object-oriented (OO) architecture, implements and manages World Wide Web sites. It makes child's play of what used to be a task-intensive process. Many professional tools are provided for constructing Internet sites and intranet applications. The core of the product is HAHTsite's integrated development environment, which includes Hypertext Markup Language (HTML) and graphic editors and site management tools in one package. The IDE alone is sufficient to earn the editor's nod, but HAHTsite has particularly robust features for conceptualizing the way Web pages work. It manages the site as well as Net Objects Fusion. Links added to HTML pages reference a link in the HAHTsite object library, for easier implementation of global changes. Objects are stored in an easy to navigate tree diagram **organized** by **sections**, such as the Web **section** for **HTML pages** and images, and the Links **section**. The HTML editor is not as WYSIWYG as other products, however. The HAHTsite Engine Web server add-on allows use of HAHTalk, a Visual Basic-type server-side scripting language that augments Java applets, JavaScript, and ActiveX controls.

PRICE: \$995

COMPANY NAME: HAHT Commerce Inc (622575)  
SPECIAL FEATURE: Screen Layouts  
DESCRIPTORS: Authoring Systems; Electronic Publishing; HTML; IBM PC &  
Compatibles; Internet Utilities; Intranets; OOP (Object Oriented  
Programming); Program Development; Web Servers; Web Site Design;  
Windows  
REVISION DATE: 20020722

9/5/8

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
(c)2002 Info.Sources Inc. All rts. reserv.

00089970 DOCUMENT TYPE: Review

PRODUCT NAMES: VRML (835315); Open Inventor (523941)

TITLE: VRML: It's Here Now  
AUTHOR: Grabowski, Ralph  
SOURCE: Cadence, v11 n4 p53(6) Apr 1996  
ISSN: 0887-9141  
HOMEPAGE: <http://www.cadenceweb.com>

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

A discussion of Virtual Reality Modeling Language (VRML) defines the technology as a method for interacting with 3-D models over the Internet. The user sees a 3D object and interacts with it by moving closer, strolling the world, and jumping to linked models. VRML software runs on all computers and graphics boards; the interface is the display and the mouse. VRML's three parts are a browser, a world, and a builder. VRML files are viewed with the browser, and the world is a VRML file that describes a simple or complex virtual reality environment. The builder is the code that creates the VRML file. Open Inventor was the forerunner of VRML, and VRML 1.0 was a rewrite of Open Inventor. The following topics are covered: the history of VRML, VRML browsers, VRML information sources, VRML file format, and developing VRML worlds.

COMPANY NAME: Vendor Independent (999999); Silicon Graphics Inc (435201)  
SPECIAL FEATURE: Screen Layouts Charts  
DESCRIPTORS: Models; Program Development; Simulation; Virtual Reality;  
VRML  
REVISION DATE: 19990830

9/5/9

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
(c)2002 Info.Sources Inc. All rts. reserv.

00088157 DOCUMENT TYPE: Review

PRODUCT NAMES: SgHTMLviewer (602591); VkWebViewer (602604)

TITLE: A Lean, Clean Web-Browsing Component  
AUTHOR: Rand, Doug  
SOURCE: X Journal, v5 n3 p46(4) Jan/Feb 1996  
ISSN: 1056-7003

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

The World Wide Web facilitates a seamless connection between computers on different platforms. A Web-based help system can be especially useful. To establish such a system, an integrated viewer is necessary. The browser needs to be simple enough to be posted in a dialog box in any application. A Silicon Graphics browser component offers a widget to display parsed HTML documents, a ViewKit component to combine the widget with an access library, and a library for Web access. The SgHTMLviewer was created from an existing HTML editor widget. The VkWebViewer widget is the primary interface used by programmers; this component contains the logic for accessing the Web, caching files, and navigating links.

COMPANY NAME: Silicon Graphics Inc (435201)  
SPECIAL FEATURE: Charts Screen Layouts  
DESCRIPTORS: Authoring Systems; Documentation; Electronic Publishing;

HTML ; Integration Software; Internet Utilities  
REVISION DATE: 20010330

File 347:JAPIO Oct 1976-2002/Apr(Updated 020805)

(c) 2002 JPO & JAPIO

File 350:Derwent WPIX 1963-2002/UD,UM &UP=200249

(c) 2002 Thomson Derwent

Set	Items	Description
S1	661	XML OR EXTENSIBLE() (MARKUP OR MARK()UP)
S2	3952	HTML OR SGML OR XHTML OR DHTML OR VRML OR VIRTUAL() REALITY- ( ) MODELING() LANGUAGE OR (MARKUP OR MARK()UP) ( ) (LANGUAGE? ? OR FORMAT? ?) OR (STRUCTURED OR WEB) (1W) (FILE OR FILES OR DOCUMEN- T? ?)
S3	116	PARS?(3N) (PART? ? OR PARTIAL? OR PORTION? OR PIECE?? OR PI- ECEMEAL OR SECTION? OR FRAGMENT?? OR SEGMENT?? OR BLOCK? ? OR ELEMENT? ? OR UNIT OR UNITS OR COMPONENT? ?) (3N) (DOCUMENT? ? - OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S4	2466	S1:S2(3W) (DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S5	5750297	(PART? ? OR PARTIAL? OR PORTION? ? OR PIECE? ? OR PIECEMEAL OR SECTION? ? OR FRAGMENT? ? OR SEGMENT? ?)
S6	43	S4(3N)S5(3N) (CONSTRUCT? OR BUILD? OR PREPAR? OR ASSEMBL? OR CREAT? OR MAK??? OR FORM??? OR FORMATION? ? OR ARRANG? OR OR- GANIZ? OR ORGANIS? OR PUT????() TOGETHER)
S7	8	PARS?(5N) (REAL() TIME OR ADAPTIV? OR ON(1W) FLY OR GRADUAL? - OR AT(1W) TIME OR AFTER(1W) (OTHER OR NEXT) OR LITTLE(1W) LITTLE- ( ) (5N) (DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE - OR STRUCTURE)
S8	20	S1:S2 AND S3
S9	51	S6:S7
S10	46	S9 AND IC=G06F
S11	45	S10 NOT S8

8/5/1 (Item 1 from file: 347)  
DIALOG(R) File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

07230980 \*\*Image available\*\*  
HASH COMPACT XML PARSER

PUB. NO.: 2002-099428 [JP 2002099428 A]  
PUBLISHED: April 05, 2002 (20020405)  
INVENTOR(s): JOHN CHARLES BROOKE  
APPLICANT(s): CANON INC  
APPL. NO.: 2001-201414 [JP 20011201414]  
FILED: July 02, 2001 (20010702)  
PRIORITY: 00 PQ8495 [AU 20008495], AU (Australia), June 30, 2000  
(20000630)  
INTL CLASS: G06F-009/45

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a method of parsing a markup language document including syntactic elements to improve a competing with a memory and a processing burden in an apparatus having hardware constraints.

SOLUTION: A hash compact XML parser comprises a step 310 of identifying a type of an element for one of the syntactic elements, a step 318 of processing the element by determining a hash representation thereof if the type is a first type and a step 314 of augmenting an at least partial structural representation of the document using the hash representation if the type is the first type.

COPYRIGHT: (C)2002,JPO

8/5/2 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

014605349 \*\*Image available\*\*  
WPI Acc No: 2002-426053/200245  
XRPX Acc No: N02-335017

#### Synchronizing AV presentation by parsing received document text and highlighting portions

Patent Assignee: IBM UK LTD (IBMC ); INT BUSINESS MACHINES CORP (IBMC )  
Inventor: BROCIOS L; FEUSTEL S; HENNESSY J; HOWLAND M; PRITKO S  
Number of Countries: 096 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200227710	A1	20020404	WO 2001GB4168	A	20010919	200245 B

Priority Applications (No Type Date): US 2000670800 A 20000927

#### Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200227710	A1	E	22 G10L-013/04	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

Abstract (Basic): WO 200227710 A1

NOVELTY - Method consists in parsing text in the received document, generating an associated audible component and displaying the text at the same time with highlighting corresponding to the audible component, which is related to but does not literally correspond to the text.

DETAILED DESCRIPTION - There are INDEPENDENT CLAIMS for:

- (1) a computer synchronizing a renderer AV presentation;
  - (2) a renderer AV synchronization computer program.
- USE - Method is for synchronizing web browser content rendering.

ADVANTAGE - Method enables content encoded using an XML based markup tag set to be read to the user audibly.

DESCRIPTION OF DRAWING(S) - The figure shows a logical flow diagram of the method.

pp; 22 DwgNo 1/7

Title Terms: SYNCHRONISATION; AV; PRESENT; PARSE; RECEIVE; DOCUMENT; TEXT;

HIGHLIGHT; PORTION

Derwent Class: P86; T01; W04

International Patent Class (Main): G10L-013/04

File Segment: EPI; EngPI

8/5/3 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014582846 \*\*Image available\*\*

WPI Acc No: 2002-403550/200243

XRFX Acc No: N02-316656

Network client e.g. web browser for automatic data processing system, controls parser which parses renderable content extracted by scanner, based on particular document type definition

Patent Assignee: GESSNER R (GESS-I)

Inventor: GESSNER R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020032709	A1	20020314	US 98162735	A	19980929	200243 B

Priority Applications (No Type Date): US 98162735 A 19980929

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020032709	A1	12	G06F-017/21	

Abstract (Basic): US 20020032709 A1

NOVELTY - A parser component (104) parses renderable content that is extracted from input content stream by a scanner (102). A replaceable document type definition component (106) controls the parser based on a particular document type definition corresponding to HTML / XML documents.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) Content manifestation method;

(b) Personal computing system usage method

USE - Network client e.g. web browser used in automatic data processing system for processing content according to a document type definition.

ADVANTAGE - A document can be processed within a browser based on a parsing grammar that is dynamically received and inserted into a parsing engine. Dynamic content parsing capability is achieved, thereby delivering extensible network client.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of network client parsing engine.

Scanner (102)

Parser component (104)

Replaceable document type definition component (106)

pp; 12 DwgNo 1/3

Title Terms: NETWORK; CLIENT; WEB; AUTOMATIC; DATA; PROCESS; SYSTEM;

CONTROL; CONTENT; EXTRACT; SCAN; BASED; DOCUMENT; TYPE; DEFINE

Derwent Class: T01

International Patent Class (Main): G06F-017/21

File Segment: EPI

8/5/4 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014495285 \*\*Image available\*\*

WPI Acc No: 2002-315988/200236

XRPX Acc No: N02-247293

Mark - up language document parsing method e.g. for multimedia document, involves processing syntactic element of document by determining hash representation, based on identified element type

Patent Assignee: CANON KK (CANO ); BROOK J C (BROO-I)

Inventor: BROOK J C

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 200154113	A	20020103	AU 200154113	A	20010628	200236 B
US 20020038320	A1	20020328	US 2001893645	A	20010629	200236
JP 2002099428	A	20020405	JP 2001201414	A	20010702	200239

Priority Applications (No Type Date): AU 20008495 A 20000630

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
-----------	------	--------	----------	--------------

AU 200154113	A	77	G06F-017/27	
--------------	---	----	-------------	--

US 20020038320	A1		G06F-015/00	
----------------	----	--	-------------	--

JP 2002099428	A	100	G06F-009/45	
---------------	---	-----	-------------	--

Abstract (Basic): AU 200154113 A

NOVELTY - Type of a syntactic element of the document, is identified. The syntactic element is processed by determining a hash representation, if the identified type is a predetermined type. Partial structural representation of the document is augmented, using the hash representation.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Mark - up language document parsing apparatus;
- (b) Mark - up language document validating apparatus;
- (c) Mark - up language document validating method;
- (d) Mark - up language document validating program;
- (e) Mark - up language document encoding method;
- (f) Mark - up language document decoding method;
- (g) Mark - up language document decoding apparatus;
- (h) Mark - up language document encoding apparatus;
- (i) Mark - up language document encoding and decoding program;
- (j) Computer program product including recorded medium storing encoding and decoding programs;
- (k) Computer program product including recorded medium storing mark - up language document parsing program;
- (l) Computer program product including recorded medium storing mark - up language document validating program

USE - For processing multimedia document for computer and data processing industries.

ADVANTAGE - Operates quickly on potentially complex, highly nested mark-up documents.

DESCRIPTION OF DRAWING(S) - The figure shows the parser system.  
pp; 77 DwgNo 1a/6

Title Terms: MARK; UP; LANGUAGE; DOCUMENT; PARSE; METHOD; DOCUMENT; PROCESS  
; SYNTACTIC; ELEMENT; DOCUMENT; DETERMINE; HASH; REPRESENT; BASED;  
IDENTIFY; ELEMENT; TYPE

Derwent Class: T01

International Patent Class (Main): G06F-009/45; G06F-015/00; G06F-017/27

File Segment: EPI

8/5/5 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014395294 \*\*Image available\*\*

WPI Acc No: 2002-215997/200227

XRPX Acc No: N02-165501

Web document conversion method involves rearranging elements in data structure obtained by parsing of web document, based on semantic

**analysis of elements**

Patent Assignee: FISCHER H (FISC-I); REILEY S (REIL-I); SINHA S (SINH-I);

YAO Y (YAOY-I)

Inventor: FISCHER H; REILEY S; SINHA S; YAO Y

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020016801	A1	20020207	US 2000222069	P	20000801	200227 B
			US 2000232373	P	20000914	
			US 2001886299	A	20010621	

Priority Applications (No Type Date): US 2001886299 A 20010621; US  
2000222069 P 20000801; US 2000232373 P 20000914

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020016801	A1		24	G06F-015/00	Provisional application US 2000222069

Provisional application US 2000232373

Abstract (Basic): US 20020016801 A1

NOVELTY - The received **web document** is **parsed** to create a data **structure** comprising hierarchical organization of **elements** from the **web document**. The semantic analysis of the elements is conducted. The elements in the data structure, is rearranged based on the semantic analysis to generate a data structure comprising the new hierarchical organization of elements from the **web document**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) **Web document** conversion system;
- (b) Program product for **web document** conversion

USE - For converting world wide **web document** into format suitable for display on client device such as wireless mobile devices connected to Internet such as mobile phones, personal digital assistant (PDA).

ADVANTAGE - The content converter acts as a pass-through server between the content server and the user device, hence the content transformer can reside anywhere in the communication path between the content server and the user device. The content transformer generates user device version of the content that is tailored for display on the user device and that provides an easily navigable overview of the content. The transformed version of the contents does not require the user device to have high data transmission bandwidth or high memory capacity.

DESCRIPTION OF DRAWING(S) - The figure shows the representation of web content comprised by exemplary web page.

pp; 24 DwgNo 2/10

Title Terms: WEB; DOCUMENT; CONVERT; METHOD; REARRANGE; ELEMENT; DATA;  
STRUCTURE; OBTAIN; PARSE; WEB; DOCUMENT; BASED; ANALYSE; ELEMENT

Derwent Class: T01

International Patent Class (Main): G06F-015/00

File Segment: EPI

8/5/6 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014320863

WPI Acc No: 2002-141565/200219

XRPX Acc No: N02-107055

Information routing system for distributing structured information between providers and consumers over a network, using an information router to parse and return relevant document portions to the consumer.

Patent Assignee: XIAM LTD (XIAM-N)

Inventor: BAKER R P; BUCKLEY P A W; MACCARTHY D M; MCDAID G; O'DONOGHUE H;  
PARKER S; WATSON C I

Number of Countries: 027 Number of Patents: 002



Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1160691	A2	20011205	EP 2001304275	A	20010514	200219 B
JP 2002032281	A	20020131	JP 2001144030	A	20010514	200224

Priority Applications (No Type Date): US 2000204237 P 20000515

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1160691 A2 E 32 G06F-017/30

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI TR

JP 2002032281 A 24 G06F-013/00

Abstract (Basic): EP 1160691 A2

NOVELTY - Requests for information by subscribers are sent to an information router which parses a document received from the provider and returns service information from which relevant portions are then sent in the form of service responses to the consumers.

DETAILED DESCRIPTION - Provides an information routing system for distributing structured information between a provider and one or more consumers. The system includes an information router for coupling the provider to the one or more consumers comprising a subscriber, a person or an organization coupled to the information router for conveying the one or more consumer's interest in a particular service. The particular service includes a particular content as defined by the subscriber. The system further includes service requesting the particular service dictated by the subscriber to the information router, and responding to the document received by the information router from the provider, the received document being parsed to include only the particular content.

INDEPENDENT CLAIMS are also included for the following:

- (1) A method for distributing structured information.
- (2) A method of communicating information from an information providing terminal to a consumer terminal.
- (3) A document in the form of an electrical signal.
- (4) A computer program.

USE - To manage the controlled exchange of structured information in **XML** format, between organizations over the Internet, enabling selection of relevant portions of data and discarding non relevant data.

ADVANTAGE - Provides gateway management, which controls the exchange of structured information between organizations and gives each organization a means to protect a single gateway computer rather than many computers. Allows consolidation of requests for documents from external computers or networks so that documents received in response can be distributed internally. Also enables conservation of network resources by selecting the relevant parts of the document near the source and combining similar requests from consumer groups, thus providing better information management, security and economy.

pp; 32 DwgNo 0/14

Title Terms: INFORMATION; ROUTE; SYSTEM; DISTRIBUTE; STRUCTURE; INFORMATION  
; CONSUME; NETWORK; INFORMATION; ROUTER; PARSE; RETURN; RELEVANT;  
DOCUMENT; PORTION; CONSUME

Derwent Class: T01

International Patent Class (Main): G06F-013/00; G06F-017/30

International Patent Class (Additional): G06F-017/60

File Segment: EPI

8/5/7 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014319298

WPI Acc No: 2002-140000/200218

Related WPI Acc No: 2002-139994

XRFX Acc No: N02-105495

Method of processing a markup language file with portions by  
downloading the file using the hyper text transfer protocol, parsing

the file for its portions and storing each portion in a directory structure

Patent Assignee: VERTICAL COMPUTER SYSTEMS INC (VERT-N)

Inventor: DAVISON J

Number of Countries: 094 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200201397	A1	20020103	WO 2001US41111	A	20010622	200218 B
AU 200173625	A	20020108	AU 200173625	A	20010622	200235

Priority Applications (No Type Date): US 2001882494 A 20010615; US 2000214067 P 20000626; US 2000235458 P 20000926

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200201397 A1 E 60 G06F-017/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200173625 A G06F-017/00 Based on patent WO 200201397

Abstract (Basic): WO 200201397 A

NOVELTY - The file is downloaded from a web-based server to a web-based client using the hyper text transfer protocol and referenced by its URL or by a name of a local file on which the user is operating. After parsing to locate the file portions, each portion is stored in a directory structure containing folders, subfolders and files and complying with the structure of the file. The arrangement is part of a system in which an enabler agent translates data from a first data model to a second data model by referencing source identifying information in the data request to determine which mapping function to use. A data collector may periodically poll a list of URLs to obtain data from servers identified by the URLs.

USE - Transferring data from a web-based server to a web-based client, e.g. B2B e-commerce data.

ADVANTAGE - Allows external data to be accepted by a local system without requiring modification of the local system.

Dwg.0/17

Title Terms: METHOD; PROCESS; LANGUAGE; FILE; PORTION; FILE; HYPER; TEXT; TRANSFER; PROTOCOL; PARSE; FILE; PORTION; STORAGE; PORTION; DIRECTORY; STRUCTURE

Derwent Class: T01

International Patent Class (Main): G06F-017/00

File Segment: EPI

8/5/8 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014263782 \*\*Image available\*\*

WPI Acc No: 2002-084480/200212

XRPX Acc No: N02-062795

Change detection in structured document e.g. HTML document, involves providing change notification when portions of primary and secondary object hierarchy are not equal

Patent Assignee: R-U-SURE LTD (RUSU-N)

Inventor: AKAVIA N; COHEN R; HADAR O; VENTURA E

Number of Countries: 025 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1164498	A1	20011219	EP 2000305857	A	20000711	200212 B

Priority Applications (No Type Date): US 2000593396 A 20000614

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1164498 A1 E 17 G06F-017/30

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): EP 1164498 A1

NOVELTY - A **structured document** is retrieved periodically and parsed into primary and secondary object hierarchy. A primary object including primary portion is identified in the primary hierarchy. A secondary object that corresponds to the primary object, is located in the secondary hierarchy. If secondary portion corresponds to primary portion, secondary portion is located in the secondary object, else a change notification is provided.

USE - For detecting changes in **structured documents** such as hypertext **markup language** ( **HTML** ) documents.

ADVANTAGE - Changes in the user indicated portions of the document, are detected with greater accuracy by detecting match of secondary and primary **portion** after **parsing** the **document** into primary and secondary object hierarchy.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of document change detection process.

pp; 17 DwgNo 1/7

Title Terms: CHANGE; DETECT; STRUCTURE; DOCUMENT; DOCUMENT; CHANGE;

NOTIFICATION; PORTION; PRIMARY; SECONDARY; OBJECT; HIERARCHY; EQUAL

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

8/5/9 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014252736 \*\*Image available\*\*

WPI Acc No: 2002-073436/200210

**Intelligent software robot capable of collecting, analyzing, converting, and posting web document**

Patent Assignee: KIM J Y (KIMJ-I); KIM Y D (KIMY-I); PARK B H (PARK-I)

Inventor: KIM J Y; KIM Y D; PARK B H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 2001073852	A	20010803	KR 20003000	A	20000121	200210 B

Priority Applications (No Type Date): KR 20003000 A 20000121

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
KR 2001073852	A		1	G06F-017/21	

Abstract (Basic): KR 2001073852 A

NOVELTY - An intelligent software robot is provided to minimize the cost by the accuracy of the data collection, the prompt collection and board update of the latest data, and the accurate document conversion in a desired form.

DETAILED DESCRIPTION - The intelligent software robot consists of a timer part, a parser part, a conversion part, and a posting part. The timer part makes the robot work during a fixed time, and stop the robot automatically when the robot finishes the work. The **parser part** designates the address of a web **page** so that the robot does not get out of the specific range for keeping the accuracy of the data. Also, the parser part makes the robot take the same course like the manual data analysis by transplanting the analysis procedure to the robot. The document conversion part makes the robot convert the data into the consistent document by transplanting the conversion procedure to the robot. The posting part makes the robot take the same course like the manual posting by transplanting the posting procedure to the robot. As a result, the manual work takes five minutes to finish the whole procedure while the robot work takes under five seconds.

pp; 1 DwgNo 1/10

Title Terms: INTELLIGENCE; SOFTWARE; ROBOT; CAPABLE; COLLECT; CONVERT; POST  
; WEB; DOCUMENT  
Derwent Class: T01  
International Patent Class (Main): G06F-017/21  
File Segment: EPI

8/5/10 (Item 9 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

014085961 \*\*Image available\*\*  
WPI Acc No: 2001-570175/200164  
XRPX Acc No: N01-424919

Structured document processing system for assembling document into  
chapters, sections, paragraphs, retrieves and replaces portion of  
document with other after processing document using embedded instructions

Patent Assignee: FUJI XEROX CO LTD (XERF )  
Inventor: KAWABE S; KUNITAKE S; YAMASHITA I  
Number of Countries: 002 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20010018697	A1	20010830	US 2001765434	A	20010122	200164 B
JP 2001209641	A	20010803	JP 200018059	A	20000125	200164

Priority Applications (No Type Date): JP 200018059 A 20000125

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20010018697	A1		65	G06F-017/24	
JP 2001209641	A		47	G06F-017/27	

Abstract (Basic): US 20010018697 A1

NOVELTY - An instruction providing unit provides an extraction  
instruction to one document portion and duplication and  
insertion/substitution instruction to other document. An analyzing  
unit analyzes the document after embedding the instructions and  
generates parse tree. A processing unit retrieves instruction  
from document based on which a portion of a document is extracted  
and is substituted with another document portion using an interpreter.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for  
structured document processing method.

USE - For assembling the document portions into chapters, sections,  
paragraphs, etc.

ADVANTAGE - As the document portion are extracted and substituted  
satisfying specific conditions excellent structure documents are  
obtained with lesser amount of efforts.

DESCRIPTION OF DRAWING(S) - The figure shows the functional block  
diagram of structured document processing system.

pp; 65 DwgNo 1/27

Title Terms: STRUCTURE; DOCUMENT; PROCESS; SYSTEM; ASSEMBLE; DOCUMENT;  
SECTION; PARAGRAPHS; RETRIEVAL; REPLACE; PORTION; DOCUMENT; AFTER;  
PROCESS; DOCUMENT; EMBED; INSTRUCTION

Derwent Class: T01  
International Patent Class (Main): G06F-017/24; G06F-017/27  
File Segment: EPI

8/5/11 (Item 10 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

014045586 \*\*Image available\*\*  
WPI Acc No: 2001-529799/200158  
XRPX Acc No: N01-393235

Dynamic web page generation optimization in world wide web environment,  
involves creating content composer for parsing and decomposing  
hypertext markup language file into page components  
Patent Assignee: AMERICA ONLINE INC (AMON-N)

Inventor: BERNSTEIN K; LEFFER R  
Number of Countries: 091 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200157721	A2	20010809	WO 2001US3424	A	20010201	200158 B
AU 200134758	A	20010814	AU 200134758	A	20010201	200173

Priority Applications (No Type Date): US 2000180394 P 20000204

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200157721 A2 E 120 G06F-017/24

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN  
CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200134758 A G06F-017/24 Based on patent WO 200157721

Abstract (Basic): WO 200157721 A2

NOVELTY - The provided hypertext markup language ( HTML ) file is read into the memory. A content composer is created to parse the HTML file such that the HTML file is decomposed into separate page components. The page components are converted into strings and stored in data structures. The data structure containing page components are cached.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for computer program product storing program for optimizing dynamic web page generation.

USE - For optimizing dynamic web page generation in world wide web environment.

ADVANTAGE - Since the reading and decomposing of HTML file is highly optimized, the server resource usage is almost reduced to null.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram showing dynamic web page generation optimization process.

pp; 120 DwgNo 1/4

Title Terms: DYNAMIC; WEB; PAGE; GENERATE; WORLD; WIDE; WEB; ENVIRONMENT;

CONTENT; COMPOSE; PARSE; DECOMPOSE; LANGUAGE; FILE; PAGE; COMPONENT

Derwent Class: T01

International Patent Class (Main): G06F-017/24

File Segment: EPI

8/5/12 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

013972800 \*\*Image available\*\*

WPI Acc No: 2001-457013/200149

XPX Acc No: N01-338734

Source data converting method in computer network, involves following unique local route of element of interest within parsed tree of mathematically regular expression to obtain signature of element interest

Patent Assignee: EVERYPATH INC (EVER-N)

Inventor: GOEL P; IYER P; KROTHAPALLI P; MAK R; MOHINDRA R; SINHA A; VITTAL S

Number of Countries: 091 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200118679	A2	20010315	WO 2000US24578	A	20000908	200149 B
AU 200073561	A	20010410	AU 200073561	A	20000908	200149
EP 1210671	A2	20020605	EP 2000961639	A	20000908	200238
			WO 2000US24578	A	20000908	

Priority Applications (No Type Date): US 99394120 A 19990910

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200118679 A2 E 37 G06F-017/00

Designated States (National): AE AL AM AT AU AZ BA BE BR BY CA CH CN  
CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200073561 A G06F-017/00 Based on patent WO 200118679

EP 1210671 A2 E G06F-017/00 Based on patent WO 200118679

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): WO 200118679 A2

NOVELTY - A unique container of the **element** of interest is located within a **parsed tree** of mathematically regular expression. A unique local route of the **element** of interest is followed within the **parsed tree** to obtain a signature of the **element** interest that is stored for later use in retrieving and rendering a value of the element of interest.

DETAILED DESCRIPTION - A source data is retrieved from a source, as a 2D data of mathematically regular expression form. The signature which is a canonical representation has unique container and unique local route. INDEPENDENT CLAIMS are also included for the following:

(a) Computer readable storage medium;

(b) Signature generating method for identifying the web element

USE - In computer network for selection of data in **HTML**.

ADVANTAGE - Enables accessing the **HTML** data through other interfaces and readers by converting two dimensional data in **HTML** format into a canonical representation for rendering in aural or other visual forms.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of system in which a design tool is employed to select and identified elements in **HTML** pages.

pp; 37 DwgNo 1/4

Title Terms: SOURCE; DATA; CONVERT; METHOD; COMPUTER; NETWORK; FOLLOW;  
UNIQUE; LOCAL; ROUTE; ELEMENT; INTEREST; TREE; MATHEMATICAL; REGULAR;  
EXPRESS; OBTAIN; SIGNATURE; ELEMENT; INTEREST

Derwent Class: T01

International Patent Class (Main): G06F-017/00

File Segment: EPI

8/5/13 (Item 12 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

013947521 \*\*Image available\*\*

WPI Acc No: 2001-431735/200146

XRPX Acc No: N01-319871

**Index creation method in database system for structured query execution, involves abstracting structured document after parsing, to obtain set of abstract values which are then stored in index**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM)

Inventor: CHANG D T; CHENG J M; CHOW J; XU J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6240407	B1	20010529	US 9883430	A	19980429	200146 B
			US 98215036	A	19981217	

Priority Applications (No Type Date): US 9883430 P 19980429; US 98215036 A 19981217

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6240407	B1	17	G06F-017/30	Provisional application US 9883430

Abstract (Basic): US 6240407 B1

NOVELTY - **Structured document** is **parsed** into several **elements** and then abstracted using a predefined abstraction procedure,

to obtain a set of abstract values. The abstract values are stored in the index for executing the structured queries in database system.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for apparatus for creating index in database.

USE - For creating index in database system for execution of structured queries.

ADVANTAGE - Provides flexibility in the designing of index and helps to find abstraction providing good searching capability at reasonable cost, by defining abstractions by user.

DESCRIPTION OF DRAWING(S) - The figure shows the abstraction procedure for structured document.

pp; 17 DwgNo 7/10

Title Terms: INDEX; CREATION; METHOD; DATABASE; SYSTEM; STRUCTURE; QUERY; EXECUTE; ABSTRACT; STRUCTURE; DOCUMENT; AFTER; PARSE; OBTAIN; SET; ABSTRACT; VALUE; STORAGE; INDEX

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

8/5/14 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

013915981 \*\*Image available\*\*

WPI Acc No: 2001-400194/200143

XRPX Acc No: N01-295064

Information terminal unit for browsing portable telephone obtains file by parsing page description language

Patent Assignee: NEC CORP (NIDE ); NIPPON DENKI IDO TSUSHIN KK (NIDE )

Inventor: HAYASHI K

Number of Countries: 002 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2352074	A	20010117	GB 200017367	A	20000714	200143 B
JP 2001027932	A	20010130	JP 99199723	A	19990714	200143
GB 2352074	B	20010829	GB 200017367	A	20000714	200150
JP 3226902	B2	20011112	JP 99199723	A	19990714	200174

Priority Applications (No Type Date): JP 99199723 A 19990714

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2352074	A		25	G06F-003/023	
JP 2001027932	A		10	G06F-003/023	
GB 2352074	B			G06F-003/023	
JP 3226902	B2		10	G06F-003/023	Previous Publ. patent JP 2001027932

Abstract (Basic): GB 2352074 A

NOVELTY - A user selects character input, control portion obtains attribute of the input character tag from the HTML data stored in memory. The attribute is set at a predetermined value i.e. a standard order of appearance of characters, and with this the input process is activated and process transits to the input state according to description of the HTML data.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a character input control method, a storage medium storing a character input control program, a portable telephone unit.

USE - For browsing portable telephone unit.

ADVANTAGE - Desired input character be done using lesser keystrokes.

DESCRIPTION OF DRAWING(S) - The figure shows a flow chart showing processing operation of character input control.

pp; 25 DwgNo 5/5

Title Terms: INFORMATION; TERMINAL; UNIT; PORTABLE; TELEPHONE; OBTAIN; FILE ; PARSE; PAGE; DESCRIBE; LANGUAGE

Derwent Class: T01; W01

International Patent Class (Main): G06F-003/023

International Patent Class (Additional): H03M-011/14; H04M-011/00

File Segment: EPI

8/5/15 (Item 14 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

013514591 \*\*Image available\*\*  
WPI Acc No: 2000-686537/200067  
XRPX Acc No: N00-507588

Computer database updating method in internet, involves executing  
execution list of traversed object built in response to update request,  
thereby updating the database

Patent Assignee: OBJECT DESIGN INC (OBJE-N); EXCELON CORP (EXCE-N)  
Inventor: BACON S; FEIN P; RABIN P; RESNICK M L; WEINREB D  
Number of Countries: 090 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200045304	A1	20000803	WO 2000US2139	A	20000128	200067 B
AU 200026338	A	20000818	AU 200026338	A	20000128	200067
EP 1192561	A1	20020403	EP 2000904610	A	20000128	200230
			WO 2000US2139	A	20000128	

Priority Applications (No Type Date): US 99117909 P 19990129

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 200045304	A1	E	32	G06F-017/30	
--------------	----	---	----	-------------	--

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN  
CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200026338	A			G06F-017/30	Based on patent WO 200045304
--------------	---	--	--	-------------	------------------------------

EP 1192561	A1	E		G06F-017/30	Based on patent WO 200045304
------------	----	---	--	-------------	------------------------------

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): WO 200045304 A1

NOVELTY - The update request having several **elements** is **parsed**.  
The **document** object model is built in response to **parsing** of update  
request and traversed to form execution list of objects. The execution  
list is executed sequentially, thereby updating the database.

DETAILED DESCRIPTION - The update request is inextensible **markup  
language** ( **XML** ) format. An INDEPENDENT CLAIM is also included for  
computer database updating apparatus.

USE - For updating computer database in internet.

ADVANTAGE - The **XML** grammar maintains relationship inside  
document and across documents so that querying can be done more quickly  
than if document has to be parsed with each query.

DESCRIPTION OF DRAWING(S) - The figure shows the flow chart of  
constructing structure index from document.

pp: 32 DwgNo 6/8

Title Terms: COMPUTER; DATABASE; UPDATE; METHOD; EXECUTE; EXECUTE; LIST;

TRAVERSE; OBJECT; BUILD; RESPOND; UPDATE; REQUEST; UPDATE; DATABASE

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

8/5/16 (Item 15 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

012408277 \*\*Image available\*\*  
WPI Acc No: 1999-214385/199918  
XRPX Acc No: N99-157788

Audio interface system e.g. for portable telephone connected to computer



network for presenting computerized documents in audio format

Patent Assignee: BELL ATLANTIC NETWORK SERVICES (BELL-N)

Inventor: CURRY J E; MAVROTHERIS E; WISE L H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5884262	A	19990316	US 96623103	A	19960328	199918 B

Priority Applications (No Type Date): US 96623103 A 19960328

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5884262	A	11	G06F-019/00	

Abstract (Basic): US 5884262 A

NOVELTY - A browser (250) retrieves a document identified by a link related to a subject word or phrase corresponding to user command, from a computer network. The document is passed into file segments by a parser (230) according to standard format. Then an audio file player (270) plays the audio file segments contained in the document to the audio interface.

DETAILED DESCRIPTION - The dual role multifrequency signal or user voice commands received by an audio interface connected to a call manager (210), are translated into a subject word or phrase by using a translator (220) which comprises a dual tone multifrequency detector or speech to text convertor. A searcher (240) searches a computer network (15) for file addresses related to the subject word or phrase. An INDEPENDENT CLAIM is included for document navigation and audio presentation method.

USE - For presenting computerized documents in hypertext markup language, standardized graphic mark up language format in audio format.

ADVANTAGE - Information from internet is accessible over telephone by people without computers or by visually impaired or mobility impaired individuals. Is used not only for accessing web pages on internet but also for accessing E-mail or other network.

DESCRIPTION OF DRAWING(S) - The figure shows the system architecture of audio interface system.

Computer network (15)  
Call manager (210)  
Translator (220)  
Parser (230)  
Searcher (240)  
Browser (250)  
Audio file player (270)  
pp; 11 DwgNo 2/4

Title Terms: AUDIO; INTERFACE; SYSTEM; PORTABLE; TELEPHONE; CONNECT;  
COMPUTER; NETWORK; PRESENT; DOCUMENT; AUDIO; FORMAT

Derwent Class: T01; W01

International Patent Class (Main): G06F-019/00

International Patent Class (Additional): H04M-001/66

File Segment: EPI

8/5/17 (Item 16 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

011950583 \*\*Image available\*\*

WPI Acc No: 1998-367493/199832

XRPX Acc No: N98-287470

SGML document control apparatus for writing and editing of SGML document group - has SGML document editor which performs SGML parsing of only part of documents after edit using DTD for partial data, corresponding to restrictions of DTD

Patent Assignee: FUJITSU LTD (FUIT )

Inventor: NAKAO Y

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Dt	Applicat No	Kind	Date	Week
JP 10143507	A	19980529	JP 97239170	A	19970904	199832 B
US 6061697	A	20000509	US 97917278	A	19970825	200030

Priority Applications (No Type Date): JP 96240250 A 19960911

#### Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 10143507	A	36	G06F-017/24	
US 6061697	A		G06F-017/30	

Abstract (Basic): JP 10143507 A

The apparatus has an **SGML** document access unit (30) which generates DTD for partial edit based on request of partial edit of **SGML** document. The DTD is added with restrictions such as addition or deletion reservation for holding confirmity of DTD on basis of contents model of expansion of DTD of document main body.

An **SGML** document editor (10) obtains object portion of DTD for **partial** edit. The editor performs **SGML parsing** of only a **part document** after editing, using DTD for partial edit according to restrictions of DTD.

ADVANTAGE - Raises independency of partial edit. Improves document production and revision efficiently. Improves command edit work efficiency.

Dwg.1/27

Title Terms: DOCUMENT; CONTROL; APPARATUS; WRITING; EDIT; DOCUMENT; GROUP; DOCUMENT; EDIT; PERFORMANCE; PARSE; PART; DOCUMENT; AFTER; EDIT; DATA; CORRESPOND; RESTRICT

Index Terms/Additional Words: STANDARD; GENERALIZED; MARKUP; LANGUAGE; DOCUMENT; TYPE; DEFINITION

Derwent Class: T01

International Patent Class (Main): G06F-017/24; G06F-017/30

International Patent Class (Additional): G06F-012/00; G06F-013/00;

G06F-017/21

File Segment: EPI

8/5/18 (Item 17 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rt's. reserv.

011901033 \*\*Image available\*\*

WPI Acc No: 1998-317943/199828

XPX Acc No: N98-249538

**HTML document interpretation system using URL in WWW - includes document type definition unit to define HTML document structure by defining link component with URL as attribute of link and component identifier as attribute value**

Patent Assignee: FUJITSU LTD (FUJIT )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10116222	A	19980506	JP 97138919	A	19970528	199828 B

Priority Applications (No Type Date): JP 96218429 A 19960820

#### Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 10116222	A	8	G06F-012/00	

Abstract (Basic): JP 10116222 A

The system specifies HyTime as the document description language. The location of the link is specified by URL in the **HTML** document. A document type definition unit defines the **HTML** document structure by defining the link components based on Hytime specification with URL as the attribute of the link component.

The component identifier is set as the attribute value. A **parsing unit** (1) interprets the **HTML document** based on the definition provided by the document type definition unit.

ADVANTAGE - Avoids need for filtering and additional manual processing of **HTML** document.

Dwg.3/8

Title Terms: DOCUMENT; INTERPRETATION; SYSTEM; DOCUMENT; TYPE; DEFINE; UNIT  
; DEFINE; DOCUMENT; STRUCTURE; DEFINE; LINK; COMPONENT; ATTRIBUTE; LINK;  
COMPONENT; IDENTIFY; ATTRIBUTE; VALUE  
Index Terms/Additional Words: HYPERMEDIA; TIME-BASED; STRUCTURED; LANGUAGE  
Derwent Class: T01  
International Patent Class (Main): G06F-012/00  
International Patent Class (Additional): G06F-017/21; G06F-017/30  
File Segment: EPI

8/5/19 (Item 18 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

011493138 \*\*Image available\*\*  
WPI Acc No: 1997-471051/199743  
XRPX Acc No: N97-392937

Structured hypermedia document storage and retrieval system for  
distributed computer network - has processor in client that traverses  
structured portion and content portion of document to reconstruct  
document, and arranges structured portion of document to allow  
incremental access by client computer

Patent Assignee: UNIV MASSACHUSETTS (UYMA-N)  
Inventor: BUFORD J F; RUTLEDGE J L  
Number of Countries: 020 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9734240	A1	19970918	WO 97US4574	A	19970317	199743 B
AU 9725857	A	19971001	AU 9725857	A	19970317	199805

Priority Applications (No Type Date): US 97792371 A 19970203; US 9613505 P  
19960315

Cited Patents: 3.Jnl.Ref

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9734240	A1	E	65	G06F-015/00	
Designated States (National): AU CA JP					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
AU 9725857	A			G06F-015/00	Based on patent WO 9734240

Abstract (Basic): WO 9734240 A

The system includes a client computer that authorises receipt of a  
**structured document**, and is capable of receiving such **structured  
document**. A server computer that, upon receiving an initial receipt  
authorisation from a client computer, retrieves the **structured  
document**, **parses the document** into a structural portion and a  
content portion. The server also sends the client computer a document  
type definition corresponding to the requested document.

The server compresses the structured portion of the document into a  
compact tree. The server compresses the content portion of the  
document. A processor in the client traverses the structured portion  
and the content portion of the document to reconstruct the document.  
The structured portion of the document is arranged to allow incremental  
access by the client computer.

ADVANTAGE - Improves efficiency of **structured document** access.

Dwg.1/13b

Title Terms: STRUCTURE; DOCUMENT; STORAGE; RETRIEVAL; SYSTEM; DISTRIBUTE;  
COMPUTER; NETWORK; PROCESSOR; CLIENT; TRAVERSE; STRUCTURE; PORTION;  
CONTENT; PORTION; DOCUMENT; RECONSTRUCT; DOCUMENT; ARRANGE; STRUCTURE;  
PORTION; DOCUMENT; ALLOW; INCREMENT; ACCESS; CLIENT; COMPUTER  
Derwent Class: T01  
International Patent Class (Main): G06F-015/00  
International Patent Class (Additional): G06F-017/30  
File Segment: EPI

8/5/20 (Item 19 f. file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

011237104 \*\*Image available\*\*  
WPI Acc No: 1997-215007/199720  
XRPX Acc No: N97-177263

Method generating structured document for in document management  
scheme - uses generated parsing rule for 1st structured document from  
non-structured one, based on difference data between 1st & 2nd  
definitions converts generated 1st document into format matching  
definition to give 2nd structured document

Patent Assignee: HITACHI LTD (HITA )

Inventor: HINO M; SATO Y

Number of Countries: 005 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 768612	A2	19970416	EP 96113874	A	19960829	199720 B
JP 9069101	A	19970311	JP 95223017	A	19950831	199720
US 6014680	A	20000111	US 96697782	A	19960829	200010

Priority Applications (No Type Date): JP 95223017 A 19950831

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

EP 768612	A2	E	54	G06F-017/22	
-----------	----	---	----	-------------	--

Designated States (Regional): DE FR GB

JP 9069101	A	15	G06F-017/27
------------	---	----	-------------

US 6014680	A		G06F-017/27
------------	---	--	-------------

Abstract (Basic): EP 768612 A

The method modifies a given first document structure definition  
(106) to match the document structure of the non **structured document**  
(101) and generate a second document **structure** definition (107). The  
control **unit** generates a **parsing** rule (111) used to perform a  
parsing process suitable for the document structure of the second  
document structure definition, by modifying marks constituting the  
second document structure definition and modifying the second structure  
definition so as to make the positional order of the marks in  
one-to-one correspondence.

Based on the generated parsing rule a first **structured document**  
(114) is generated from the non-structured one. Based on difference  
data between the first and second definitions converts the generated  
first document into a format matching definition to generate a second  
**structured document** .

USE - For management of legal documents, for example, and  
generating **structured document** from non **structured document** .

ADVANTAGE - Enables proper document structure analysis of documents  
of several fields, and directly generates document instance matching  
individual document structure.

Dwg.1/38

Title Terms: METHOD; GENERATE; STRUCTURE; DOCUMENT; DOCUMENT; MANAGEMENT;  
SCHEME; GENERATE; PARSE; RULE; STRUCTURE; DOCUMENT; ONE; BASED; DIFFER;  
DATA; DEFINE; CONVERT; GENERATE; DOCUMENT; FORMAT; MATCH; DEFINE;  
STRUCTURE; DOCUMENT

Derwent Class: T01

International Patent Class (Main): G06F-017/22; G06F-017/27

11/5/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

07223508 \*\*Image available\*\*  
DEVICE FOR DYNAMICALLY PREPARING STRUCTURED DOCUMENT

PUB. NO.: 2002-091947 [JP 2002091947 A]  
PUBLISHED: March 29, 2002 (20020329)  
INVENTOR(s): UCHIKADO MAKOTO  
MATSUNAGA SHIGEO  
ITO YASUKI  
MIHARA TAKEHIDE  
KIBO KIYOTAKA  
SAWABE EMI  
APPLICANT(s): HITACHI LTD  
HITACHI SOFTWARE ENG CO LTD  
APPL. NO.: 2000-280238 [JP 2000280238]  
FILED: September 14, 2000 (20000914)  
INTL CLASS: G06F-017/21 ; G06F-012/00

#### ABSTRACT

PROBLEM TO BE SOLVED: To dynamically prepare a structured document by combining accumulated partial documents.

SOLUTION: This structured document dynamically preparing device consists of a structured document registering means 103 for registering the structured document to be a management object in a structured document management database, a reference authority management database 102 in which the reference authority data of the structured document set in each user are registered and a structured document outputting means 105. The outputting means 105 acquires user's reference authority by referring to the reference authority management database, acquires a partial document over which the reference authority is held from the structured document management database on the basis of the acquired reference authority, dynamically structures the acquired partial document and outputs the structured partial document.

COPYRIGHT: (C)2002,JPO

11/5/4 (Item 4 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

07097592 \*\*Image available\*\*  
DOCUMENT DATA PROCESSOR

PUB. NO.: 2001-325248 [JP 2001325248 A]  
PUBLISHED: November 22, 2001 (20011122)  
INVENTOR(s): IWATA NOBUO  
APPLICANT(s): FUJI XEROX CO LTD  
APPL. NO.: 2000-144947 [JP 2000144947]  
FILED: May 17, 2000 (20000517)  
INTL CLASS: G06F-017/21

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a document data processor having improved processing efficiency in contrast to a conventional document data processor which has a problem that the processing efficiency is low since the processing of an HTML parser is performed after the processing of an XML parser is performed.

SOLUTION: In this document data processor, a CPU 11 reads document data and performs the processing as the XML parser. At the time of detecting a tag which is not an XML tag during the processing of the XML parser, the start tag processing part or end tag processing part of the HTML parser is activated and the pertinent part is processed. Further, at the time of finding the tag related to CDATA or a pre-format, a

corresponding processing is performed.

COPYRIGHT: (C)2001,JPO

11/5/9 (Item 9 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

06839853 \*\*Image available\*\*  
METHOD AND DEVICE FOR COMPRESSING STRUCTURED DOCUMENTS AND  
COMPUTER-READABLE RECORDING MEDIUM RECORDING STRUCTURED DOCUMENT  
COMPRESSING PROGRAM

PUB. NO.: 2001-067348 [JP 2001067348 A]  
PUBLISHED: March 16, 2001 (20010316)  
INVENTOR(s): YAHAGI HIRONORI  
APPLICANT(s): FUJITSU LTD  
APPL. NO.: 2000-098043 [JP 200098043]  
FILED: March 31, 2000 (20000331)  
PRIORITY: 11-173468 [JP 99173468], JP (Japan), June 21, 1999 (19990621)  
INTL CLASS: G06F-017/21 ; G06F-012/00 ; G06F-017/30 ; H03M-007/30

#### ABSTRACT

PROBLEM TO BE SOLVED: To improve compressibility by analyzing the tree structure of an element in a document realizing value and shifting information on a leaf element into a starting tag as the attribute of a master element to maintain the feature of a **structured document** to **make** compression of a tag **part** possible.

SOLUTION: A document realizing value analyzing part 20 analyzes a document realizing value forming an XML document and outputs the element list (file) of leaves as the analyzing result of the tree structure (master and slave relation) of an element. At this time, in the list of the elements of the leaves outputted from the part 20, elements arranged as the leaves of the tree structure without having slave elements are detected and a corresponding relation between the element of the leaves and a master element is clearly written. A document realizing value changing part moves information on the leaf element at the document realizing value into the starting tag of the master element as the attribute of the master element of the leaf element in accordance with the analyzing result (the list of the elements of the leaves) by the part 20 so as to simplify the expression of the document realizing value. Then, the XML document is outputted and stored in a document storage part 10, etc., after being changed and compressed.

COPYRIGHT: (C)2001,JPO

11/5/11 (Item 11 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

06807041 \*\*Image available\*\*  
WEB PAGE DISPLAY METHOD AND RECORDING MEDIUM WHERE PROCESSING PROGRAM  
THEREOF IS RECORDED

PUB. NO.: 2001-034525 [JP 2001034525 A]  
PUBLISHED: February 09, 2001 (20010209)  
INVENTOR(s): NAGASHIMA SACHIKO  
APPLICANT(s): HITACHI INFORMATION SYSTEMS LTD  
APPL. NO.: 11-205884 [JP 99205884]  
FILED: July 21, 1999 (19990721)  
INTL CLASS: G06F-012/00

#### ABSTRACT

PROBLEM TO BE SOLVED: To improve the convenience of a system which has information communications using Web pages of the internet, an intranet, etc., by improving the transmission efficiency of information by Web pages.

SOLUTION: If a cache file having the same file name (file path) as a Web page file is saved when the Web page file is read out of a Web server computer by a client computer and displayed, the generation and update dates of the respective files are compared (step 102) and when the Web page file is newer, the Web page file and cache file are compared by texts (steps 107 to 109); and updated text data parts of the Web server file are displayed discriminatingly from text data of other parts (steps 110, 111).

COPYRIGHT: (C)2001,JPO

11/5/13 (Item 13 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

06621598 \*\*Image available\*\*  
STRUCTURED DOCUMENT MANAGING DEVICE AND STRUCTURED DOCUMENT RETRIEVING METHOD

PUB. NO.: 2000-207409 [JP 2000207409 A]  
PUBLISHED: July 28, 2000 (20000728)  
INVENTOR(s): ITO MASAO  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD  
APPL. NO.: 11-007616 [JP 997616]  
FILED: January 14, 1999 (19990114)  
INTL CLASS: G06F-017/30 ; G06F-017/21

#### ABSTRACT

PROBLEM TO BE SOLVED: To fast perform full text retrieval designating an element of a structured document by encoding the structure information of the structured document and adding it to a retrieval file about the full text retrieval of a structured document.

SOLUTION: A registering part 11a prepares structure information, tag management information, index information and text information from structured information and registers them in a data managing part 12. A retrieval information storing part 12c simultaneously manages retrieval information for fast retrieval and information obtained by encoding structure information. A retrieving part 11e reads the retrieval information of a data retrieving part and performs fast full text retrieval according to an inputted retrieval condition. Further, in the case of retrieval designating an element, a document structure deciding part 11e collates it with structure information attached to retrieval to narrow down a retrieval condition. A result producing part 11f returns a document satisfying the retrieval condition to a result outputting part 18.

COPYRIGHT: (C)2000,JPO

11/5/15 (Item 15 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

06569987 \*\*Image available\*\*  
STRUCTURED DOCUMENT SAVING METHOD, DATA REPEATING DEVICE, AND DATA TRANSMITTING AND RECEIVING DEVICE

PUB. NO.: 2000-155756 [JP 2000155756 A]  
PUBLISHED: June 06, 2000 (20000606)  
INVENTOR(s): MAEDA SEIJI  
KITSU TOSHIKI  
TORII OSAMU  
KANAI TATSUNORI  
YOKOGAWA TAKESHI  
YAO HIROSHI  
TANAKA HISAKO

APPLICANT(s): TOSHIBA C  
APPL. NO.: 10-255411 [JP 98255411]  
FILED: September 09, 1998 (19980909)  
PRIORITY: 10-199584 [JP 98199584], JP (Japan), June 30, 1998 (19980630)  
INTL CLASS: G06F-017/27 ; G06F-017/30

ABSTRACT

PROBLEM TO BE SOLVED: To automatically save a **part** including important contents of a **structured document** without placing any burden on a user by extracting and saving the important **part** from the **structured document** by making use of the structure of the **structured document** obtained on the basis of a previously specified specific extraction standard.

SOLUTION: A WWW page browser 113 having received an indication from the user informs a proxy server 107 of a request to send a WWW page that the user specifies. The proxy server 107 similarly informs a WWW server 104 of the request to send the WWW page and also inputs the received WWW page to a document important item extracting device 110. The document important item extracting device 110 analyzes the structure of the WWW page as a structured document and retrieves whether or not the page contains the important item that the user has specified. When the important item is not found, the important item is extracted and saved in a recording device 111, and a tag indicating that the important item is extracted is added to the WWW page.

COPYRIGHT: (C)2000,JPO

11/5/16 (Item 16 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

06471588 \*\*Image available\*\*  
STRUCTURED DOCUMENT DATABASE SYSTEM

PUB. NO.: 2000-057163 [JP 2000057163 A]  
PUBLISHED: February 25, 2000 (20000225)  
INVENTOR(s): KITANO TAKUYA  
APPLICANT(s): NEC CORP  
APPL. NO.: 10-227479 [JP 98227479]  
FILED: August 12, 1998 (19980812)  
INTL CLASS: G06F-017/30 ; G06F-012/00

ABSTRACT

PROBLEM TO BE SOLVED: To make document element retrieval from ambiguous condition designation to a structured document performable and also to make a retrieval which does not deteriorate retrieval performance realizable even by ambiguous structure condition designation.

SOLUTION: A document retrieval expression inputting part 3 receives an input that expresses ambiguous condition designation as a retrieval expression so that document element retrieval according to the ambiguous condition designation can be realized to a structured document stored in an object oriented database 2 by a structured document inputting part 1 and a document retrieval expression analyzing **part 4** analyzes this conditional expression and **constructs** a program accessing the **structured document** database 2. A **document** retrieving **part 5** actually executes the program and a retrieved document displaying part 6 shows a retrieval element that is retrieved as an execution result of the program to the system outside.

COPYRIGHT: (C)2000,JPO

11/5/18 (Item 18 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.



06083574     \*\*Image ava   ble\*\*  
SYSTEM AND METHOD FOR PREPARING HYPERTEXT FILE

PUB. NO.:        11-025088   [JP 11025088   A]  
PUBLISHED:       January 29, 1999 (19990129)  
INVENTOR(s):     ITO MASAKI  
APPLICANT(s):    N T T DATA KK  
APPL. NO.:       09-176956   [JP 97176956]  
FILED:           July 02, 1997 (19970702)  
INTL CLASS:       G06F-017/27 ;   G06F-012/00 ;   G06F-017/21

ABSTRACT

PROBLEM TO BE SOLVED: To make it possible to automatically link plural text files by a keyword even when the keyword includes a variation element such as a change in a word form and to improve the efficiency of preparation of a hypertext file.

SOLUTION: A matching processing part 33 scans an English text by using a matching condition based on an annotation text, retrieves an annotation word matched with the matching condition, and when the annotation word does not match, a condition control part 35 changes the matching condition and repeatedly scans the English text. Upon detecting matching, an edition processing part 34 pads link information to the corresponding position of the matched annotation text in the corresponding position of the English text to **form** an English hypertext **mark - up language ( HTML ) file** . The control **part** 35 monitors the matching processing of the matching processing part 33, and when matching is not formed, changes the matching condition to a prescribed form to apply the changed matching condition to matching again.

COPYRIGHT: (C)1999, JPO

11/5/21        (Item 21 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05977867     \*\*Image available\*\*  
WWW HTML FILE CREATING METHOD AND DEVICE

PUB. NO.:        10-260967   [JP 10260967   A]  
PUBLISHED:       September 29, 1998 (19980929)  
INVENTOR(s):     KAKITA NAOKO  
                  ISHIKAWA KATSUTOSHI  
                  UEDA KUNIO  
                  HATTORI NAOMI  
APPLICANT(s):    TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP  
                  (Japan)  
APPL. NO.:       09-066372   [JP 9766372]  
FILED:           March 19, 1997 (19970319)  
INTL CLASS:       [6]   G06F-017/24 ;   G06F-003/14 ;   G06F-012/00 ;   G06F-017/21  
  
JAPIO CLASS:     45.4 (INFORMATION PROCESSING -- Computer Applications); 45.2  
                  (INFORMATION PROCESSING -- Memory Units); 45.3 (INFORMATION  
                  PROCESSING -- Input Output Units)  
JAPIO KEYWORD: R139 (INFORMATION PROCESSING -- Word Processors)

ABSTRACT

PROBLEM TO BE SOLVED: To simply and also easily create an HTML file in a state that is the same with an external appearance seen on WWW by arranging image creating parts on an object image to be created and also providing a file creating image that reflects a text sentence described in an original description area on a file.

SOLUTION: A part processing part 18 which processes a part that is selected on a screen decides a part type when a part that creates an image is used and performs arrangement on the image in accordance with the **part** . An **HTML file creating part** 25 creates a WWW HTML file from

created image data and link data, stores file data in an HTML file storing part 26 and manages it. An original description area creating part 30 creates an original description area where a text sentence that is directly described on an original HTML file can be written on a screen, and creates an original description area in an area on the screen according to a coordinate position specification when an original description area part is selected.

11/5/22 (Item 22 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05949768 \*\*Image available\*\*  
DOCUMENT PROCESSOR

PUB. NO.: 10-232868 [JP 10232868 A]  
PUBLISHED: September 02, 1998 (19980902)  
INVENTOR(s): HOSHINA TAKAYUKI  
APPLICANT(s): FUJI XEROX CO LTD [359761] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 09-036418 [JP 9736418]  
FILED: February 20, 1997 (19970220)  
INTL CLASS: [6] G06F-017/27 ; G06F-012/00 ; G06F-017/21  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 45.2 (INFORMATION PROCESSING -- Memory Units)

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a document processor capable of efficiently managing a document by converting a document structure without inviting the omission of the document structure.

SOLUTION: When this document processor 11 receives an SGML document provided with the document structure of DTD-A, a document conversion part 11e structure-converts the SGML document to the document form of DTD-B and stores it in a document storage part 11g while adding the element name of a context losing node for losing context information by the mapping of the element name as an attribute value. At the time of receiving the document request of the SGML document from a document preparation device 10a or 10b, a document inverse conversion part 11f restores the SGML document to the document structure of DTD-A by conversion based on the mapping of the element name and the attribute value.

11/5/23 (Item 23 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05833174 \*\*Image available\*\*  
DOCUMENT PROCESSOR

PUB. NO.: 10-116274 [JP 10116274 A]  
PUBLISHED: May 06, 1998 (19980506)  
INVENTOR(s): ARAI KYOICHI  
APPLICANT(s): FUJI XEROX CO LTD [359761] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 08-269935 [JP 96269935]  
FILED: October 11, 1996 (19961011)  
INTL CLASS: [6] G06F-017/21 ; G06F-012/00 ; G06F-017/27  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 45.2 (INFORMATION PROCESSING -- Memory Units)

#### ABSTRACT

PROBLEM TO BE SOLVED: To easily composite one SGML(standard generalized mark-up language) document without defining any new DTD(document type definition) at the time of compositing SGML documents defined with different DTDs including document components, and to shape the composited SGML document.

SOLUTION: A retrieval part 4 retrieves a logical object matching with a composition conversion instruction to an SGML document m1 with a 1st DTD which is read in by a document read part 1 and verified and an SGML document m2 which is defined with a 2nd DTD different from the 1st DTD according to the description of the composition conversion instruction instructed by a conversion instruction part 3. When this matching logical object is present, a correspondence part 5 makes the logical structures of the **SGML documents** m1 and m2 correspond according to the matching logical object, a substitution part 6 performs substitution of the matching logical object, and a combination part 7 performs a process for combination with the substituted logical object, so that the SGML documents m1 and m2 can be composited and converted without generating any new DTD and the composed document can be shaped by a layout process, etc.

11/5/25 (Item 25 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05667418 \*\*Image available\*\*  
HTML DOCUMENT BOOK FORM SHAPING METHOD AND DEVICE THEREFOR

PUB. NO.: 09-282218 [JP 9282218 A]  
PUBLISHED: October 31, 1997 (19971031)  
INVENTOR(s): SUZUKI TAKEYA  
YOSHIMUNE TOSHIYA  
OZAWA HIDEAKI  
HAMADA HIROSHI  
APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 08-086989 [JP 9686989]  
FILED: April 10, 1996 (19960410)  
INTL CLASS: [6] G06F-012/00 ; G06F-012/00 ; G06F-003/14 ; G06F-017/27 ; G06F-017/30  
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.3 (INFORMATION PROCESSING -- Input Output Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)

#### ABSTRACT

PROBLEM TO BE SOLVED: To efficiently perform shaping HTML documents to the form of a book and display it by describing the logical structures of index, chapter and paragraph, etc., in linkage between HTML documents and rearranging the HTML documents based on the information.

SOLUTION: An HTML document acquisition part 22 acquires the HTML document, and an HTML syntax analysis part 23 analyzes the syntax of the HTML document and interprets attributes as the description of the logical structures of the hierarchy, of the book shape and context between the **HTML documents**. A book form structure analysis part 24 converts the logical structures between the HTML documents expressed by using the attributes into tree structures. Then, the tree structures are rearranged so as to eliminate discrepancy with the context between the documents expressed by the attributes as much as possible. Finally, the HTML documents are linearly arranged based on the rearranged tree structures. A book form shaping part 27 performs the processing of dividing the HTML document to pages based on the arrangement, a display data generation part 29 converts it to the form of performing display by each page and an information display part 30 displays the converted **HTML document** by the **form** of the book.

11/5/26 (Item 26 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05513600 \*\*Image available\*\*  
STRUCTURED DOCUMENT PREPARING DEVICE

PUB. NO.: 09-128400 [JP 9128400 A]  
PUBLISHED: May 16, 1997 (19970516)  
INVENTOR(s): IMAMURA MAKOTO  
MORIGUCHI OSAMU  
APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 07-280630 [JP 95280630]  
FILED: October 27, 1995 (19951027)  
INTL CLASS: [6] G06F-017/30  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)

ABSTRACT

PROBLEM TO BE SOLVED: To improve the diversion property of document data and the possibility of an automatic database register processing by processing an attribute in a document tag based on a designated document type and generating a structured document.

SOLUTION: The structured document preparing device is provided with a document picture data input means 1, a document picture area and logical structure correspondence definition storage part 2, a document picture area segmenting means 3, a pattern recognizing means 4, a structured document preparing means 5, a structured document output means 6, a control means 7 and a document-type definition storage part 35. The document picture area segmenting means 3 segments a prescribed part against a pattern-recognized input through the use of information concerning a document picture area in the correspondence definition storage part 2. When a stipulated output document is designated, the structured document preparing means 5 refers to a definition name and logical structure corresponding to designation in the document-type definition storage part 35, processes the area which is segmented by the document picture area segmenting means 3 by a processing attribute in the correspondence definition storage part 2 and prepares the structured document in accordance with logical structure.

11/5/27 (Item 27 from file: 347)  
DIALOG(R) File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05247188 \*\*Image available\*\*  
COLLABORATIVE DOCUMENT PREPARATION DEVICE

PUB. NO.: 08-202688 [JP 8202688 A]  
PUBLISHED: August 09, 1996 (19960809)  
INVENTOR(s): MORIGUCHI KYOKO  
MOCHIZUKI SUKEYUKI  
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 07-008136 [JP 958136]  
FILED: January 23, 1995 (19950123)  
INTL CLASS: [6] G06F-017/21  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)  
JAPIO KEYWORD: R139 (INFORMATION PROCESSING -- Word Processors)

ABSTRACT

PURPOSE: To improve the efficiency of preparing and editing operation for a collaborative document.

CONSTITUTION: The collaborative document preparation device is provided with plural data access devices 2... having a data management device 1 having an attribute storage file 12 which contains a structured document specifying a document preparer and document structure and a document storage file 14 containing the collaborative document consisting of prepared and edited partial documents, an attribute reflection device 23 which stores the attribute storage file with an individual area wherein a specific document preparer can prepare and edit the partial documents on the basis of input information and an all-preparer changeable area wherein all document preparers can prepare and edit the partial documents as the structured document, and a document file operation device 16

which reads the partial documents corresponding to the individual area and all-preparer file changeable area according to the structured document in the file in editing mode and performs a preparing and editing process.

11/5/28 (Item 28 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05061090 \*\*Image available\*\*  
PREPARING DEVICE FOR STRUCTURED DOCUMENT

PUB. NO.: 08-016590 [JP 8016590 A]  
PUBLISHED: January 19, 1996 (19960119)  
INVENTOR(s): NISHIMURA YOSHITANE  
APPLICANT(s): RICOH CO LTD [000674] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 06-151158 [JP 94151158]  
FILED: July 01, 1994 (19940701)  
INTL CLASS: [6] G06F-017/27  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)

#### ABSTRACT

PURPOSE: To efficiently prepare a document by setting, measuring, and displaying information regarding the volume of the document.

CONSTITUTION: To prepare the structured document, a document editing part 3 is actuated and the template of the document to be prepared is read out of a document template part 2. The called document template is displayed at a display part 6. The document which is created according to the structure of the document template which is displayed is stored in an in-editing document storage part 4. The document which is already edited is stored in a document storage part 1. Processes for measuring and setting the volume of the document are performed by a document volume measuring process part 4 by sending and receiving information to and from the in-editing storage part 4. Thus, a document measuring process part 5 is provided, so the volume of the document being prepared can be displayed and adjusted during the document preparation.

11/5/29 (Item 29 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

04868103 \*\*Image available\*\*  
STRUCTURED DOCUMENT EDITING DEVICE

PUB. NO.: 07-160703 [JP 7160703 A]  
PUBLISHED: June 23, 1995 (19950623)  
INVENTOR(s): SENDA SHIGEYA  
APPLICANT(s): RICOH CO LTD [000674] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 05-293182 [JP 93293182]  
FILED: November 24, 1993 (19931124)  
INTL CLASS: [6] G06F-017/24  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)

#### ABSTRACT

PURPOSE: To show a user an edited picture in more natural arrangement and display.

CONSTITUTION: An editor receives an SGML document 1 as the input and stores the edited result of an editing processing part 7 in a document holding part 6 in an SGML document form as the output. In the case of a new document, the editor makes the user designate the DTD and reads in only the DTD. When the editor reads in the SGML document and the DTD, the input is analyzed by an SGML parser 3. This parser 3 generates a finite automaton(DFA) 5 correspondingly to the DTD as the analysis result and

stores it in a DTD holding part 4. A tree structure corresponding to the document structure is internally generated as the analysis result of the SGML document itself and is stored in the document holding part 6. A display device is determined based on action information corresponding to elements defined by document type definition.

11/5/32 (Item 32 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

04806107 \*\*Image available\*\*  
DOCUMENT PROCESSOR

PUB. NO.: 07-098707 [JP 7098707 A]  
PUBLISHED: April 11, 1995 (19950411)  
INVENTOR(s): KUROSAWA HIROSHI  
APPLICANT(s): FUJI XEROX CO LTD [359761] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 05-243146 [JP 93243146]  
FILED: September 29, 1993 (19930929)  
INTL CLASS: [6] G06F-017/27  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)

#### ABSTRACT

PURPOSE: To provide a document processor which can output a single structured document or plural document parts forming a single structured document out of a single document whose contents are not structured.

CONSTITUTION: A contents information input means 10 supplies the data as the contents information on a document, and a contents information interpreting means 20 interprets the data supplied from the means 10. A logical structure defining means 30 defines the logical structure to be produced, and a logical structure definition interpreting means 40 interprets the contents of definition. An output destination defining means 50 defines the output destination of the document, and an output destination definition interpreting means 60 interprets the contents of definition. A converter means 70 reads the contents information out of a contents information holding means 80 based on the interpreting result of the means 20 and also converts the contents information into the document parts based on the interpreting result of the means 40. A document forming means 90 outputs the converted document parts or a structured document consisting of these document parts to the output destination, i.e., the retrieving result of the means 60

11/5/33 (Item 33 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

04744293 \*\*Image available\*\*  
DOCUMENT EDITING DEVICE

PUB. NO.: 07-036893 [JP 7036893 A]  
PUBLISHED: February 07, 1995 (19950207)  
INVENTOR(s): TSUJI SEIJI  
NAWATA TAKASHI  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 05-181136 [JP 93181136]  
FILED: July 22, 1993 (19930722)  
INTL CLASS: [6] G06F-017/27  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 45.3 (INFORMATION PROCESSING -- Input Output Units)

#### ABSTRACT

PURPOSE: To provide a document editing device capable of editing a

structured document making character strings, graphics and images at its description contents by an optional output format without changing the order of items or their meanings.

CONSTITUTION: This document editing device is provided with a working space arranging processing part 13 for arranging a structured document on a working space similarly to conventional routine document edition, a real area arranging processing part 14 for transforming the coordinates of the result arranged by the processing part 13 into an optional layout format in an output device and a visual point correcting processing part 23 discriminating a drawing element such as an arrow mark having directivity from the one such as a character string having its meaning in the turning direction of the character. Consequently a document output matched with a layout format can be obtained in accordance with a graphic. Since the reference of the graphic and the detailed explanation of its contents can be simultaneously executed, the working efficiency of an operator trying to understand a document can be improved.

11/5/34 (Item 34 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2002 JPO & JAPIO. All rts. reserv.

04466983 \*\*Image available\*\*  
DOCUMENT PROCESSOR

PUB. NO.: 06-110883 [JP 6110883 A]  
PUBLISHED: April 22, 1994 (19940422)  
INVENTOR(s): KONDO KATSUYUKI  
APPLICANT(s): FUJI XEROX CO LTD [359761] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 04-262599 [JP 92262599]  
FILED: September 30, 1992 (19920930)  
INTL CLASS: [5] G06F-015/20 ; G06F-015/20  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)  
JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessors); R139 (INFORMATION PROCESSING -- Word Processors)  
JOURNAL: Section: P, Section No. 1774, Vol. 18, No. 391, Pg. 158, July 21, 1994 (19940721)

#### ABSTRACT

PURPOSE: To make a header or a non-header of an arbitrary character string without paying the attention to the level of the header neither bringing about contradictions in the document structure with respect to documentation under the display of a print image.

CONSTITUTION: When a character string which a header is not made of is selected by a selecting part 11 and it is indicated by an indicating part 12 that a header should be made of this character string, a specifying part 22 specifies the paragraph structure based on the structured document stored in a document data storage part 30, and a header making processing part 23 generates a header structure corresponding to the character string. If it is indicated by the indicating part 12 that a header should not be made of the character string, it is processed by a non-header making processing part 25. A numbering part 26 redetermines a header number like a chapter number or a section number of the header of the structured document reflecting the processing result of the header making processing part 23 or the non-header making processing part 25 and displays it on a display part 40.

11/5/36 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014625366 \*\*Image available\*\*  
WPI Acc No: 2002-446070/200248  
XRPX Acc No: N02-351452

Display capabilities provision method for computer software, involves creating markup language document by combining process data with markup language fragment file data and display unit through browser

Patent Assignee: SIEMENS AG (SIEI )

Inventor: WEINLAENDER M

Number of Countries: 026 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1199631	A2	20020424	EP 2001122222	A	20010917	200248 B

Priority Applications (No Type Date): US 2000672214 A 20000928

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1199631 A2 E 27 G06F-009/44

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI TR

Abstract (Basic): EP 1199631 A2

NOVELTY - A markup language document (52) is created by combining the control process data with the data from the markup language fragment (44) file. The markup language document is displayed through a browser (20).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Display capabilities provision system for computer software;
- (2) Process data display system;
- (3) Computer software generation method.

USE - For providing display capabilities for computer software.

ADVANTAGE - Decreases the time required to develop software and to increase the quality of software development. Simplifies and modularizes the task of visualization programming and provides more effective, more quick and comparable budget based visualization programming.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the software display capability provision system.

Browser (20)

Markup language fragment (44)

Markup language document (52)

pp; 27 DwgNo 1/9

Title Terms: DISPLAY; CAPABLE; PROVISION; METHOD; COMPUTER; SOFTWARE;

LANGUAGE; DOCUMENT; COMBINATION; PROCESS; DATA; LANGUAGE; FRAGMENT; FILE;

DATA; DISPLAY; UNIT; THROUGH

Derwent Class: T01

International Patent Class (Main): G06F-009/44

File Segment: EPI

11/5/39 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014189554 \*\*Image available\*\*

WPI Acc No: 2002-010251/200201

XRPX Acc No: N02-008589

Markup language paring method of web browser programs, HTML documents, involves excluding selected portions of markup identified as unused portions in predetermined manner

Patent Assignee: ARMSTRONG S M (ARMS-I); CRADDOCK A J (CRAD-I); KHUWAJA R A (KHUW-I); MACFARLANE I A (MACF-I)

Inventor: ARMSTRONG S M; CRADDOCK A J; KHUWAJA R A; MACFARLANE I A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20010042081	A1	20011115	US 97994452	A	19971219	200201 B

Priority Applications (No Type Date): US 97994452 A 19971219

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes



Abstract (Basic): US 20010042081 A1

NOVELTY - A portion of the markup unused by a particular application is identified, in a predetermined manner. A pared document is **created** using the same **markup language** of the **document**, excluding the identified **portions** such as insignificant white space characters, markup comments and meta tag.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) HTML document retrieval method;
- (b) HTML document paring apparatus;
- (c) HTML document retrieval apparatus;
- (d) Machine readable medium containing stored software for document paring;
- (e) Machine readable medium containing stored software for document retrieval

USE - For paring HTML or XML document, web browser programs used for data transmission to cellular phone subscribers and other applications.

ADVANTAGE - Avoids transmission or storage of unused information and reduces size of document before delivery to particular application. Hence reduces time to download the information which is especially beneficial for user using slow links such as connection through a cellular phone. Hence enables faster delivery of contents to the customers, which improves response time and reduces cost of using the service.

DESCRIPTION OF DRAWING(S) - The figure shows the markup paring process.

pp; 17 DwgNo 4/9

Title Terms: LANGUAGE; PARING; METHOD; WEB; PROGRAM; DOCUMENT; EXCLUDE;

SELECT; PORTION; IDENTIFY; PORTION; PREDETERMINED; MANNER

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/00

File Segment: EPI

11/5/40 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

013811803 \*\*Image available\*\*

WPI Acc No: 2001-296015/200131

XRPX Acc No: N01-212006

Compression method of structured documents such as hypertext markup language for use in internet, involves adding information about branch component of tree structure as attribute of parent component in starting tag

Patent Assignee: FUJITSU LTD (FUIT )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001067348	A	20010316	JP 200098043	A	20000331	200131 B

Priority Applications (No Type Date): JP 99173468 A 19990621

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2001067348	A	53	G06F-017/21	

Abstract (Basic): JP 2001067348 A

NOVELTY - An analyzer (20) analyzes the tree structure of the component using document implementation value, so as to **form** a **structured document**. A modification **section** (40) adds the information about the branch component of a tree structure as attribute of parent component in the starting tag of the parent component.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Structured document compressing device;

(b) Structured document compression program

USE - For compressing structured documents such as hypertext markup language (HTML), standard generalized markup language (SGML), extensible markup language (XML) etc., for use in internet.

ADVANTAGE - Enables compression tag without damaging the characteristic of electronic documents and improves the compression rate of document greatly.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of structured document compressing device. (Drawing includes non-English language text).

Analyzer (20)

Modification section (40)

pp; 53 DwgNo 1/40

Title Terms: COMPRESS; METHOD; STRUCTURE; DOCUMENT; LANGUAGE; ADD; INFORMATION; BRANCH; COMPONENT; TREE; STRUCTURE; ATTRIBUTE; PARENT; COMPONENT; START; TAG

Derwent Class: T01; U21

International Patent Class (Main): G06F-017/21

International Patent Class (Additional): G06F-012/00 ; G06F-017/30 ;

H03M-007/30

File Segment: EPI

11/5/42 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

013464523

WPI Acc No: 2000-636466/200061

XRPX Acc No: N00-471872

Live parsing edit system for mixed language documents has a common parser able to use a number of language specific parsers and switch between them as necessary

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
RD 434149	A	20000610	RD 2000434149	A	20000520	200061 B

Priority Applications (No Type Date): RD 2000434149 A 20000520

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
RD 434149	A	3	G06F-000/00	

Abstract (Basic): RD 434149 A

NOVELTY - A common **parser** program implements a set of generic **parser** services and provides an interface to the edit system. A **document parser** analyzes the **document** and initializes a language **parser** which **parses** one unit **at a time** passed to it by a process token. The process token is responsible for checking that the language parser is appropriate and a language switch is initiated when a different language parser is needed. The new language parser is re-initialized and parsing continues.

USE - In development edit systems dealing with programming languages and scripts containing more than one syntax, e.g. C/C++ code with imbedded SQL code and/or imbedded CICS code.

ADVANTAGE - None specifically given.

pp; 3 DwgNo 0/1

Title Terms: LIVE; PARSE; EDIT; SYSTEM; MIX; LANGUAGE; DOCUMENT; COMMON; ABLE; NUMBER; LANGUAGE; SPECIFIC; SWITCH; NECESSARY

Derwent Class: T01

International Patent Class (Main): G06F-000/00

File Segment: EPI

File 348:EUROPEAN PATENTS 1978-2002/Aug W01  
(c) 2002 European Patent Office  
File 349:PCT FULLTEXT 1983-2002/UB=20020801,UT=20020725  
(c) 2002 WIPO/Univentio

Set	Items	Description
S1	3706	XML OR EXTENSIBLE() (MARKUP OR MARK()UP)
S2	13073	HTML OR SGML OR XHTML OR DHTML OR VRML OR VIRTUAL()REALITY- ()MODELING()LANGUAGE OR (MARKUP OR MARK()UP)() (LANGUAGE? ? OR FORMAT? ?) OR (STRUCTURED OR WEB)(1W)(FILE OR FILES OR DOCUMEN- T? ?)
S3	537	PARS?(3N)(PART? ? OR PARTIAL? OR PORTION? OR PIECE?? OR PI- ECEMEAL OR SECTION? OR FRAGMENT?? OR SEGMENT?? OR BLOCK? ? OR ELEMENT? ? OR UNIT OR UNITS OR COMPONENT? ?)(3N)(DOCUMENT? ? - OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S4	6242	S1:S2(3W)(DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S5	1178996	(PART? ? OR PARTIAL? OR PORTION? ? OR PIECE? ? OR PIECEMEAL OR SECTION? ? OR FRAGMENT? ? OR SEGMENT? ?)
S6	169	S4(3N)S5(3N)(CONSTRUCT? OR BUILD? OR PREPAR? OR ASSEMBL? OR CREAT? OR MAK??? OR FORM??? OR FORMATION? ? OR ARRANG? OR OR- GANIZ? OR ORGANIS? OR PUT????()TOGETHER)
S7	56	PARS?(5N)(REAL()TIME OR ADAPTIV? OR ON(1W)FLY OR GRADUAL? - OR AT(1W)TIME OR AFTER(1W)(OTHER OR NEXT) OR LITTLE(1W)LITTLE- )(5N)(DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE - OR STRUCTURE)
S8	98	S1:S2(S)S3 AND IC=G06F
S9	47	S1(S)S3 AND IC=G06F
S10	52	S8 NOT S9
S11	35	S6(S)S1
S12	27	S11 AND IC=G06F
S13	25	S12 NOT S8
S14	42	S7 AND IC=G06F
S15	38	S14 NOT (S8 OR S13)

10/5,K/5 (Item - from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2002 European Patent Office. All rts. reserv.

01105920

Method and apparatus for multi-user awareness and collaboration  
Verfahren und Vorrichtung für die Kollaboration und das gemeinsame  
Bewusstsein von mehreren Benutzern  
Methode et appareil pour la connaissance et la co-operation entre plusieurs  
utilisateurs

PATENT ASSIGNEE:

Sun Microsystems, Inc., (2616580), 901 San Antonio Road, M/S UPAL01-521,  
Palo Alto, California 94043, (US), (Applicant designated States: all)

INVENTOR:

Burridge, Richard N., 154 Santa Clara Avenue, Redwood City, California  
94061, (US)

LEGAL REPRESENTATIVE:

Goddard, Heinz J., Dr. (4231), FORRESTER & BOEHMERT Pettenkoferstrasse  
20-22, 80336 München, (DE)

PATENT (CC, No, Kind, Date): EP 969365 A2 000105 (Basic)  
EP 969365 A3 020327

APPLICATION (CC, No, Date): EP 99112012 990621;

PRIORITY (CC, No, Date): US 108063 980630

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-009/46

ABSTRACT EP 969365 A2

In embodiments of the present invention incorporate a facility to make a user, or client, aware of other users that are currently viewing the same Web, or display page. Functionality is provided in a browser to allow a user to initiate a collaboration operation with other users on the same Web page. A user provides user information to a registry via a registration process. The registry is further updated to include an entry identifying the page that is currently being viewed by a user. The user can access a collaboration interface to view a list of users that are currently viewing the same page as the user. The collaboration interface further allows the user to select a collaboration operation to collaborate with one or more users that are currently viewing the same page. In embodiments of the invention, the collaboration interface is generated by a Java applet and is contained within a portion of any general-purpose or special-purpose browser. The collaboration interface accepts input entered within an input field of the interface and processes it accordingly. A request to change Web pages updates the registry to reflect the new page. If the input is a request to initiate a collaborative operation, the collaboration interface initiates the operation.

ABSTRACT WORD COUNT: 208

NOTE:

Figure number on first page: 4

LEGAL STATUS (Type, Pub Date, Kind, Text):

Search Report: 020327 A3 Separate publication of the search report  
Application: 20000105 A2 Published application without search report  
Examination: 20000105 A2 Date of request for examination: 19990621

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200001	1048
SPEC A	(English)	200001	5167
Total word count - document A			6215
Total word count - document B			0
Total word count - documents A + B			6215

INTERNATIONAL PATENT CLASS: G06F-009/46

...SPECIFICATION for displaying pages of information that a server sends to

the client via the Internet. A page, or Web page, is typically defined using Hypertext Markup Language (HTML) statements that specify the pages GUI elements. A browser parses the HTML statements to generate and display the Web page in the browser's display area. The browser further provides a mechanism for the user to input...

...the Internet, to the appropriate Internet server. When a response is received at the user's computer, the browser parses the response (e.g., an HTML, document that defines a Web page).

There is currently no interaction available between users that are viewing pages in a general-purpose browser. It is...

10/5,K/6 (Item 6 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2002 European Patent Office. All rts. reserv.

01079107

Document re-authoring systems and methods for providing device-independent access to the world wide web

Systeme zum erneuten Entwerfen von Dokumenten und Verfahren fur den gerateunabhagigen Zugang zum weltweiten Netz

Systemes pour la re-conception de documents et methodes pour rendre l'accès a la toile Internet independant de l'appareil

PATENT ASSIGNEE:

XEROX CORPORATION, (219783), Xerox Square, Rochester, New York 14644, (US), (Applicant designated States: all)

INVENTOR:

Bickmore, Timothy W., 13 R hall Street, Somerville, Massachusetts 02144, (US)

Girgensohn, Andreas, 210 Waverly Street, No 4, Menlo Park, California, (US)

Schilit, William N., 973 Menlo Avenue, Menlo Park, California 94025, (US)

Sullivan, Joseph W., 175 Bluxome Street, No 103, San Francisco, California 94107, (US)

LEGAL REPRESENTATIVE:

Skone James, Robert Edmund (50281), GILL JENNINGS & EVERY Broadgate House 7 Eldon Street, London EC2M 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 949571 A2 991013 (Basic)  
EP 949571 A3 000105

APPLICATION (CC, No, Date): EP 99302718 990407;

PRIORITY (CC, No, Date): US 80909 P 980407; US 239295 990129

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/22 ; G06F-017/30

ABSTRACT EP 949571 A2

An automatic re-authoring system and method re-author a document originally designed for display on a desktop computer screen for display on a smaller display screen, such as those used with a PDA or a cellular telephone. The automatic re-authoring system and method input a document to be re-authored and re-authoring parameters, such as display screen size, default font and the like. The automatic re-authoring system and method convert the document into a number of pages, where each page is fully displayable with only at most a minimal amount of scrolling on the display screen of the PDA or cellular phone. At each stage of the re-authoring, a number of different transformations are applied to the original document or a selected re-authored page. The selected re-authored page is the best page resulting from the previous re-authoring stage. The best page at each stage is determined based on the re-authoring parameters and the content of the document being re-authored.

ABSTRACT WORD COUNT: 158

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 000830 A2 Date of request for examination: 20000705

Change: 20000105 A2 International Patent Classification changed:  
19991118

Application: 991013 A2 Published application without search report

Search Report: 20000105 A3 Separate publication of the search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9941	1106
SPEC A	(English)	9941	14883
Total word count - document A			15989
Total word count - document B			0
Total word count - documents A + B			15989

INTERNATIONAL PATENT CLASS: G06F-017/22 ...

... G06F-017/30

...SPECIFICATION are similar to those described in S. Bonhomme et al.,  
"Interactively Restructuring HTML Documents", Fifth International World  
Wide Web Conference, Paris, France, May 1996. Whenever portions of the  
parse tree are elided or transformed, an HTML hypertext link is  
added into the parse tree to reference the node identifiers of all  
affected parse tree subtrees, enabling users to request the original...

10/5,K/7 (Item 7 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2002 European Patent Office. All rts. reserv.

00836549

Information retrieval system

Informationswiederauffindungssystem

Systeme de recouvrement d'informations

PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington  
98052-6399, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Ferrel, Patrick J., 5240 21st St., N.E., Seattle, Washington 98105, (US)  
Kerr, Randy, 10408 180th Ct., N.E., Redmond, Washington 98052, (US)  
Uppala, Krishna, 5612 159th Pl., N.E., Redmond, Washington 98052, (US)  
Nareddy, Krishna, 14550 N.E. 35th St., Apt. B102, Bellevue, Washington  
98007, (US)

LEGAL REPRESENTATIVE:

VOSSIUS & PARTNER (100311), Postfach 86 07 67, 81634 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 774722 A2 970521 (Basic)  
EP 774722 A3 981202

APPLICATION (CC, No, Date): EP 96118399 961115;

PRIORITY (CC, No, Date): US 560281 951117

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 774722 A2

A information retrieval system wherein design and content are  
separated. Within a section of a title, a designer can layout pages with  
controls that define areas for content to be inserted into the pages. Two  
commonly used controls in the system are a static story control, wherein  
a preselected story is statically placed on a page in the area defined by  
the control, and a dynamic story control, wherein the designer defines  
search objects to retrieve stories. An information retrieval (IR) server  
indexes and searches stories in titles. Indexing takes place when a title  
is released to the network by a publisher workstation. The IR server  
interrelates title, section and story objects by their globally unique  
identifiers and creates a routing table which is used to locate objects  
across multiple database partitions. The IR search service is requested  
in two different ways at customer runtime. The first way is the  
resolution of the search objects to retrieve matching stories. The  
retrieved stories are concatenated and poured into the area defined by  
the dynamic control when the title is viewed. In the second way, the IR  
search service is requested when a search is initiated by a customer

using a "find" dialog to search across all stories in 1 or more titles,  
both dynamic and static.  
ABSTRACT WORD COUNT: 216

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 001122 A2 Date of dispatch of the first examination  
report: 20001005  
Application: 970521 A2 Published application (A1with Search Report  
;A2without Search Report)  
Change: 020306 A2 Title of invention (German) changed: 20020111  
Change: 970528 A2 Inventor (change)  
Search Report: 981202 A3 Separate publication of the European or  
International search report  
Examination: 990714 A2 Date of filing of request for examination:  
990518

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	1769
SPEC A	(English)	EPAB97	24381
Total word count - document A			26150
Total word count - document B			0
Total word count - documents A + B			26150

INTERNATIONAL PATENT CLASS: G06F-017/30

...SPECIFICATION the DTD manager which interprets and acts on the event.  
Examples of events: start tag encountered, end tag encountered or  
attribute encountered.

For each tagged **element** in the **parsed MDF file** there exists a  
node identifying the tag and attributes whose data is the element that  
was tagged. In a Multimedia Publishing **Markup Language** (MPML) format,  
tags may be nested within each other. As a result, a node in the tree may  
point to other nodes representing the nested...

10/5,K/8 (Item 8 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2002 European Patent Office. All rts. reserv.

00827287

Method and apparatus for generating structured document  
Verfahren und Gerat zur Erzeugung eines strukturierten Dokuments  
Methode et appareil pour generer un document structure

PATENT ASSIGNEE:

HITACHI, LTD., (204144), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo  
100, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Sato, Yoshifumi, 40-1, Utsukushigaokanishi-2-chome, Aoba-ku, Yokohama-shi  
, (JP)

Hino, Masatoshi, 26-20-612, Sagamigaoka-6-chome, Zama-shi, (JP)

LEGAL REPRESENTATIVE:

Strehl Schubel-Hopf Groening & Partner (100941), Maximilianstrasse 54,  
80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 768612 A2 970416 (Basic)

APPLICATION (CC, No, Date): EP 96113874 960829;

PRIORITY (CC, No, Date): JP 95223017 950831

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/22

ABSTRACT EP 768612 A2

A structured document generating method and apparatus capable of easily  
generating a structured document matching the document structure of each  
non-structured document, by using a rule directly generated from a preset  
document structure definition for the conversion of the non-structured  
document into the structured document. A keyword extracting module (102)  
extracts a keyword representative of the document structure from a  
non-structured document (101) by using a keyword extracting rule (103),

and a keyword/text model (104) is generated which is described by two elements including keywords and other strings. A parsing module (105) generated by a process (113) of automatically parsing the document structure by referring to a parsing rule (110) generated by modifying and converting DTD (106), performs a parsing process relative to the keyword/text model (104) to generate an interim SGML document (114). An SGML document correcting module (115) modifies the interim SGML document (113) and generates a final output of an SGML document by referring to DTD different information (109) generated when the parsing rule was generated.

ABSTRACT WORD COUNT: 170

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 970416 A2 Published application (Alwith Search Report  
;A2without Search Report)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	854
SPEC A	(English)	EPAB97	12164
Total word count - document A			13018
Total word count - document B			0
Total word count - documents A + B			13018

INTERNATIONAL PATENT CLASS: G06F-017/22

...SPECIFICATION to support to generate a rule for extracting a keyword.

In order to achieve the above objects, the invention provides a method of generating a **structured document** for a **structured document** generating apparatus having at least an input/output device, a control unit, and a repository wherein a non- **structured document** not explicitly given the document structure and input from the input/output device is converted into a **structured document** explicitly given the document structure, in accordance with a document structure definition defining the document structure, the method comprising the steps of: modifying a given first document structure definition so as to match the document structure of the input non- **structured document** and generate a second **document structure** definition; the control unit generating a **parsing** rule used for performing a parsing process suitable for the document structure of the second document structure definition, by modifying marks constituting the second document...

...so as to make the positional order of the marks in one-to-one correspondence; in accordance with the generated parsing rule, generating a first **structured document** from the input non- **structured document** ; and in accordance with difference data between the first document structure definition and the second document structure definition, converting the generated first **structured document** into a format matching the first document structure definition to thereby generate a second **structured document** .

With the above configuration, conversion from the non-structured document to the structured document can be performed, for example, by a parsing module which analyzes...structured document repository 23. The processes to be executed include a process 34 of generating a parsing module and a process 35 of generating a **structured document** . The **parsing** module generating process 34 constitutes **part** of the **structured document** generating process 35. The **structured document** generating process 35 is a process of converting a non- **structured document** stored in the non- **structured document** repository 21 into a **structured document** by using a document structure definition, a keyword extraction rule, a rule conversion regulation, and the like respectively stored in the non- **structured document** repository 21. The parsing module generating process 34 and the **structured document** generating process 35 can be described by known programming languages.

Next, the outline of processes of the first embodiment will be described.

Fig. 1 is...



- ...CLAIMS 106, 107) ...clude mark trains disposed for defining the relationship between character strings constituting a document to be input.
3. A method of generating a **structured document** according to claim 2, wherein said parsing rule (111) is generated by embedding a process of explicitly giving the **parsed portion of document structure** to be **parsed**, into an interim rule generated by converting said second document structure definition in accordance with a given rule conversion regulation (112).
  4. A method of...

10/5,K/9 (Item 9 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2002 European Patent Office. All rts. reserv.

00803833

**Method and apparatus for comparison of structured documents**  
**Verfahren und Anordnung zum Vergleichen von strukturierten Dokumenten**  
**Procede et dispositif de comparaison de documents structures**  
PATENT ASSIGNEE:

HITACHI, LTD., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo 101, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Aoyama, Yuki, Rumieru Miyamaedaira 306, 7-2, Miyamaedaira-1-chome, Miyamae-ku, Kawasaki-shi, (JP)  
Higashino, Junichi, 108-11, Ominami-3-chome, Musashimurayama-shi, (JP)

LEGAL REPRESENTATIVE:

Strehl Schubel-Hopf Groening & Partner (100941), Maximilianstrasse 54, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 747836 A1 961211 (Basic)

APPLICATION (CC, No, Date): EP 96108939 960604;

PRIORITY (CC, No, Date): JP 95161398 950605

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/27

ABSTRACT EP 747836 A1

A document difference extraction method and apparatus which is used for extracting the difference between **structured documents** properly meeting the sense of a document editor taking the logical meaning and structure of the **structured documents** into consideration. **Structured documents** are edited and stored in a memory unit by a document editing program (104). With reference to a comparison criterion (107) set for the logical structure of each **structured document** before and after edition, the logical structure of the structural documents before and after edition read from the memory unit is analyzed by a **structured document parsing** program (105), and the difference between the **structured documents** is extracted by a **structured document** difference extraction program (106) in such a manner as to satisfy the comparison criterion in accordance with the result of parsing. The comparison criterion (107) assumes the form of a table containing a plurality of tags representing logical structures and types of tags for the comparison criterion. The tag types for comparison criterion include tags having contents which are compared only when the particular tags are coincident with each other, tags having contents which are ignored at the time of comparison, a set of tags having the same logical meaning, and a set of tags having contents which are not compared with each other. (see image in original document)

ABSTRACT WORD COUNT: 254

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 961211 A1 Published application (A1with Search Report ;A2without Search Report)

Examination: 970723 A1 Date of filing of request for examination: 970521

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	1223
SPEC A	(English)	EPAB96	6928
Total word count - document A			8151
Total word count - document B			0
Total word count - documents A + B			8151

INTERNATIONAL PATENT CLASS: G06F-017/27

...ABSTRACT A1

A document difference extraction method and apparatus which is used for extracting the difference between **structured documents** properly meeting the sense of a document editor taking the logical meaning and structure of the **structured documents** into consideration. **Structured documents** are edited and stored in a memory unit by a document editing program (104). With reference to a comparison criterion (107) set for the logical structure of each **structured document** before and after edition, the logical structure of the structural documents before and after edition read from the memory unit is analyzed by a **structured document parsing** program (105), and the difference between the **structured documents** is extracted by a **structured document** difference extraction program (106) in such a manner as to satisfy the comparison criterion in accordance with the result of parsing. The comparison criterion (107)...

...CLAIMS the structured documents before and after said edition is extracted as a difference by a processor, said method comprising the steps of:  
 editing and storing **structured documents** before and after edition in said memory unit (201);  
**parsing** a logical **structure** of each of the **structured documents** before and after edition read from said memory unit on the basis of a comparison criterion set for the logical structure of each of said **structured documents** before and after edition (203); and  
 extracting a difference between the structured documents which can satisfy said comparison criterion with respect to the result of...

...character string between the two structured documents before and after edition as a difference, wherein said processor includes:

means (104) for editing and storing the **structured documents** in said memory unit;

means (105) for **parsing** a logical **structure** of the **structured documents** before and after edition read from said memory unit on the basis of a comparison criterion set for the logical structure of each **structured document** before and after edition; and

means (106) for extracting a difference between the **structured documents** so as to satisfy said comparison criterion in accordance with the result of parsing of the **structured documents**.

7. A structured document difference extraction apparatus according to Claim 6, wherein said comparison criterion assumes the form of a table including at least a...also to extract the difference by character between non-coincident nodes.

15. A medium according to Claim 14, wherein:

said second program code means for **parsing** of **structured documents** includes a program code **section** for causing the computer to alter the node configuration of said document tree representing the document structure in accordance with said comparison criterion at the...

00485884 \*\*Image available\*\*

**A METHOD FOR EXTENDING THE HYPERTEXT MARKUP LANGUAGE (HTML) TO SUPPORT ENTERPRISE APPLICATION DATA BINDING**

**PROCEDE D'EXTENSION DU LANGAGE HTML (HYPERTEXT MARKUP LANGUAGE) POUR L'ACCEPTATION D'UNE LIAISON DE DONNEES D'APPLICATIONS D'ENTREPRISES**

Patent Applicant/Assignee:

UNISYS CORPORATION,

Inventor(s):

MUTSCHLER Eugene Otto III,

STEFANIAK Joseph Peter,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9917236 A1 19990408

Application: WO 98US20500 19980930 (PCT/WO US9820500)

Priority Application: US 97941437 19970930

Designated States: AU CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-017/30

International Patent Class: G06F-009/44

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 8390

**English Abstract**

A method operating in a computing system that has at least one server (14) and a multiplicity of clients (15, 16) coupled thereto. The server (14) has a CPU executing a Web Server program and a repository (18) coupled thereto for storing description language of a Form to be displayed. The server (14) is coupled to a host (10) having a CPU executing a legacy application containing the Form. At least one of the clients (15, 16) executes a Web browser program. The method of the present invention operates in the server (14) and the client (15, 16) for supporting enterprise application data binding. The method in the server (14) includes the steps of opening the Forms and requesting a first Form (152) and associating data names with data values received from the host and sending them (153) to the client (15, 16). The client (15, 16) then locates a corresponding GUI Control and makes an association between each of the data names (154) and a corresponding GUI Control and obtains the contents of each of the corresponding GUI Controls associated with a data name and places data value/data name into a buffer (155). Next, the server (14) processes the contents of the buffer and sends (156) it to the host (10), whereby the GUI Controls are displayed containing values and states from the Form.

**French Abstract**

L'invention concerne un procede fonctionnant dans un systeme de traitement comprenant au moins un serveur (14) et une multiplicite de clients (15, 16) couples a ce dernier. Le serveur (14) comprend une UC qui execute un programme serveur Web, et un depot (18) couple au serveur servant a memoriser le langage de description d'une grille a afficher. Le serveur (14) est couple a un hote (10) comprenant une UC qui execute une application anterieure contenant la grille. Au moins un des clients (15,16) execute un programme de navigation Web. Ce procede se deroule dans le serveur (14) et dans le client (15, 16) afin de permettre le liaison de donnees des applications d'entreprise. Dans le serveur, le procede (14) comprend les operations suivantes: ouverture des grilles, demande d'une premiere grille (152) et association des noms de donnees avec des valeurs de donnees fournies par l'hote puis envoi de ces dernieres (153) au client (15, 16). Le client (15,16) localise alors une commande IUG correspondante et procede a une association entre chacun des noms (154) de donnees et une commande IUG correspondante, obtient les contenus de chacune de commandes IUG correspondantes associees a un nom de donnees et place une valeur/un nom de donnee dans une memoire tampon (155). Ensuite le serveur (14) traite le contenu de la memoire tampon et

l'envoi (156) a l'note (10), ce qui provoque l'affichage des commandes IUG contenant les valeurs et les etats definis par la grille.

Main International Patent Class: G06F-017/30  
International Patent Class: G06F-009/44  
Fulltext Availability:  
Detailed Description

#### Detailed Description

... of the drawings within the PC 15, as denoted by a connector I.

Referring now to FIG. 6D at the connector I, the Web browser parses the HTML page (block 98). Upon 24 encountering the object reference to the SCL Web Control, an inquiry is made as to whether or not the SCL Web Control...

...downloaded (block 100). Once the SCL Web Control is present, the browser invokes the SCL Web Control and passes to it the parameters from the HTML page and other necessary information, including references to the Web browser's window (block 101). Following this, the SCL Web Control parses the SCL Text...

10/5,K/45 (Item 35 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00485841 \*\*Image available\*\*

A METHOD FOR EXTENDING THE HYPERTEXT MARKUP LANGUAGE (HTML) TO SUPPORT A GRAPHICAL USER INTERFACE CONTROL PRESENTATION  
PROCEDE D'EXTENSION DE LANGAGE HTML PERMETTANT UNE PRESENTATION DE COMMANDES D'INTERFACE GRAPHIQUE UTILISATEUR

Patent Applicant/Assignee:

UNISYS CORPORATION,

Inventor(s):

MUTSCHLER Eugene Otto III,

STEFANIAK Joseph Peter,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9917193 A1 19990408

Application: WO 98US20419 19980930 (PCT/WO US9820419)

Priority Application: US 97941438 19970930

Designated States: AU CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-009/44

International Patent Class: G06F-017/30

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 6937

#### English Abstract

A method useful in a computing system that has at least one server (10) and a multiplicity of clients (15, 16) coupled thereto by means of a network (13). The server (10) has a repository (17) coupled to it for storing SCL of a legacy Form and at least one of the clients (15, 16) executes a Web browser program. The method operates in the same client (15, 16) that the Web browser operates and is invoked (151) by the Web browser program for supporting the exact reproduction of the legacy Form. SCL Text is parsed (152) to obtain a sequence of SCL Constructs, some of which contain information relating to GUI Controls of the legacy Form. For each SCL Construct with a GUI Control to be displayed (153), a GUI Control is painted (154) by using type and positioning information derived from each of the SCL Constructs, respectively. Font information

from the SCL Construct is used (155) to set font characteristics of the GUI Control and user inputs are interpreted to navigate from GUI Control to GUI Control. Finally, the user inputs are interpreted (156) to invoke a process that sends contents of the GUI Controls to the host application (157).

#### French Abstract

L'invention concerne un procede utile dans un systeme informatique qui comporte au moins un serveur (10) et de multiples clients (15, 16) couples a celui-ci au moyen d'un reseau (13). Le serveur (10) comporte un referentiel (17) qui lui est couple, et qui sert a stocker un langage de commande d'ecran (SCL) d'une forme existante, et au moins un des clients (15, 16) execute un programme d'explorateur web. Le procede fonctionne chez le meme client (15, 16) pour lequel l'explorateur web fonctionne, et est appele (151) par le programme d'explorateur web pour permettre une reproduction exacte de la forme existante. Le texte SCL est analyse (152) pour obtenir une sequence d'elements SCL, dont certains contiennent des informations liees a des commandes d'interfaces graphiques utilisateur (GUI) de la forme existante. Pour chaque element SCL comportant une commande GUI a afficher (153), une commande GUI est brosee (154) au moyen d'informations de type et de position obtenues a partir de chacun des elements SCL, respectivement. Des informations de polices provenant des elements SCL sont utilisees (155) pour etablir des caracteristiques de polices de la commande GUI, et des entrees utilisateur sont interpretees pour naviguer de commande GUI en commande GUI. Finalement, les entrees utilisateur sont interpretees (156) pour appeler un procede servant a envoyer le contenu des commandes GUI vers l'application (157) hote.

Main International Patent Class: G06F-009/44

International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

#### Detailed Description

... of the drawings within the PC 15, as denoted by a connector I.

Referring now to FIG. 6D at the connector 1, the Web browser **parses** the **HTML page** ( **block 98**). Upon encountering the object reference to the SCL Web Control, an inquiry is made as to whether or not the SCL Web Control is...

...described hereinafter. Once the SCL Web Control is present, the browser invokes the SCL Web Control and 25 passes to it the parameters from the **HTML page** and other necessary information, including references to the Web browser's window (block 101) . Following this, the SCL Web Control parses the SCL Text...

10/5,K/47 (Item 37 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00455325 \*\*Image available\*\*

NEWS STORY MARKUP LANGUAGE AND SYSTEM AND PROCESS FOR EDITING AND PROCESSING DOCUMENTS  
SYSTEME ET LANGAGE DE BALISAGE D'ACTUALITES ET PROCEDE SERVANT A EDITER ET A TRAITER DES DOCUMENTS

Patent Applicant/Assignee:

AVID TECHNOLOGY INC,

Inventor(s):

PARKS David M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9845789 A1 19981015

Application: WO 98US6244 19980330 (PCT/WO US9806244)

Priority Application: US 97832866 19970404

Designated States: AU CA CN DE GB JP AT BE CH DE DK ES FI FR GB GR IE IT LU

MC NL PT SE  
Main International Patent Class: G06F-017/21  
Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 11150

#### English Abstract

The present invention defines a news story document format that supports a wide variety of news story information in a structured manner. The news story markup language of the present invention provides constraints to define timing information for a news story, to define machine control commands that may be used to automate control functions, or to associate multiple elements within one or more documents for the purpose of synchronizing the elements. The present invention defines a system and a method for editing and processing news story documents.

#### French Abstract

L'invention concerne un nouveau format de document d'actualites supportant une variete importante d'informations d'actualites de facon structuree. Le langage de balisage d'actualites objet de l'invention fait etat de contraintes servant a definir une information de synchronisation pour un document d'actualites, de maniere a determiner des instructions de commande de machine pouvant etre utilisees afin d'automatiser des fonctions de commande, ou a associer des elements multiples a l'interieur d'un ou de plusieurs documents dans le but de synchroniser ces elements. L'invention definit un systeme et un procede servant a editer et a traiter des documents d'actualites.

Main International Patent Class: G06F-017/21  
Fulltext Availability:  
Detailed Description  
Claims

#### Detailed Description

... of the input file 220.

Parser elements such as a syntactic 222 and semantic 223 analyzer are elements that can be constructed for a particular SGML DTD. A particular DTD can be defined by one or more grammar rules, as described later below for an embodiment of the present invention in...

...may be constructed that verifies the format of a document. Parser creation is well known in the art of compiler theory and verification of document markup languages .

Figs. 2C and 2D show graphical user interfaces that may be displayed by an NSML viewer 206. In Fig. 2C, an example screen for use...

#### Claim

... of elements and identifiers.

9 The process of claim 1, wherein the step of verifying further includes the steps of checking usage of a plurality of elements and identifiers according to the document type definition to produce a parse tree from the plurality of elements and identifiers; and generating an output file having a hierarchical file structure based on the parse tree that conforms to the document type definition. 1...

...of claim 9, further comprising a step of interpreting the output file by a viewer.

1 A data processing system for interpreting a news story markup language document, the system comprising:  
means for obtaining a news story markup language document from a storage location; means for parsing the news story markup language document, producing a plurality of  
markup language tags and associated text;

means for converting the plurality of markup language tags and associated text to system instructions.

12 The data processing system of claim 11, further

10/5,K/49 (Item 39 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.

00449403 \*\*Image available\*\*

# REPLICATING FORMS FROM HTML TEMPLATES

SYSTEME PERMETTANT LA COMMUNICATION ENTRE UN CLIENT ET DES PROGRAMMES  
SERVEUR NON RESIDENTS

Patent Applicant/Assignee:

INTERNATIONAL BUSINESS MACHINES CORPORATION,

Inventor(s):

BRANDT Marcia Lynn,  
DICECCO Joseph Vincent,  
HANSEN Jason Robert,  
O'KEEFE Timothy Jude,  
OLSON Diane Elaine,  
SNYDER Devon Daniel,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9839867 A2 19980911

Application: WO 98US2180 19980130 (PCT/WO US9802180)

Priority Application: US 97810156 19970225

Designated States: JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-017/21

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 12344

## English Abstract

An enhanced document browsing method and apparatus for creating a form from a template that includes replication blocks, that replicates (1042) at least one field in at least one replication block characterized by a block name to generate at least first and second replicated fields; modifies (1044) the block name to generate a first field name; modifies (1044) the block name to generate a second field name; associates the field names with respective ones of the first and second replicated fields; counts (1068) the number of replications; and transmits (1045) the number of replications to at least one client computer (100).

## French Abstract

L'invention concerne un procede et un appareil perfectionnes de consultation rapide de documents, pour creer une forme a partir d'un modele qui comporte des blocs de reproduction, qui reproduit (1042) au moins une zone dans au moins un bloc de reproduction caracterise par un nom de bloc en vue de generer au moins des premiere et deuxieme zones reproduites; modifie (1044) le nom de bloc pour generer un premier nom de zone; modifie (1044) le nom de bloc pour generer un deuxieme nom de zone; associe ces noms de zone avec respectivement les premiere et deuxieme zones reproduites; compte (1068) le nombre de reproductions; et transmet (1045) le nombre de reproductions a au moins un ordinateur client (100).

Main International Patent Class: G06F-017/21

Fulltext Availability:

Detailed Description

## Detailed Description

... such forms, to facilitate quickly and efficiently generating the forms.

A template can include replication indicators that prompt the CGI of the server computer to **parse** the **HTML** file and substitute multiple **pieces** of data for each particular substitution variable. To do this,

the CGI replicates . section of the HTML for that between replication indicators in the form, with each replication corresponding to each instance of data that is to be rendered. As sections of the HTML form are replicated, the name of the replicated fields are also replicated. Such replication results in multiple HTML fields that have the same name, but...

10/5,K/50 (Item 40 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00440483 \*\*Image available\*\*

**AN APPARATUS AND METHOD FOR RETRIEVING INFORMATION USING STANDARD OBJECTS  
DISPOSITIF ET PROCEDURE SERVANT A EXTRAIRE DES INFORMATIONS AU MOYEN D'OBJETS  
STANDARD**

Patent Applicant/Assignee:

INTERNATIONAL BUSINESS MACHINES CORPORATION,

Inventor(s):

GROUT Gordon Blair,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9830947 A2 19980716

Application: WO 97US21304 19971120 (PCT/WO US9721304)

Priority Application: US 96771735 19961220

Designated States: JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-013/00

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 7749

**English Abstract**

A document manager (120) runs at a client computer (100) and retrieves documents (160) downloaded from a server computer (150) across a communications medium (200). The documents (160) can contain embedded links to objects (163), which are building blocks that make up or are associated with the documents. The client computer (100) keeps a local copy of a standard-set of objects (118), so that when the client computer (100) needs to present the linked objects to the user, the linked objects that are part of the standard-set do not need to be retrieved from the server (150) by the client (100). When a linked object (163) is needed, the document manager parses the embedded link to the object and extracts the file name of the object. The document manager (120) then searches a name list (122), which contains all the names of objects in the standard-set. If the file name from the link is in the name list (122), the document manager (120) uses the object of the same name in the local copy of the standard-set (118). If the file name is not in the name list (122), the document manager retrieves the linked object (163) using the full embedded link.

**French Abstract**

Un gestionnaire de documents (120) en service dans un ordinateur client (100) extrait des documents (160) telecharges depuis un ordinateur serveur (150) par l'intermediaire d'un support de communications (200). Ces documents (160) peuvent contenir des liaisons imbriquees avec des objets (163) qui sont des blocs fonctionnels remplaçant les documents ou associes a ces derniers. L'ordinateur client (100) conserve une copie locale d'un ensemble standard d'objets (118), de sorte que le client (100) n'a pas besoin, quand l'ordinateur client (100) doit presenter a l'utilisateur ces objets lies qui font partie de l'ensemble standard, d'extraire ces objets lies du serveur (150). En cas de besoin de l'objet lie (163), le gestionnaire de documents analyse la liaison imbriquee par rapport a l'objet et extrait le nom du fichier de l'objet. Ce gestionnaire de documents (120) recherche ensuite une liste de noms (122) contenant tous les noms des objets de l'ensemble standard. Si le nom de fichier de la liaison se trouve dans la liste de noms (122), le



gestionnaire de document (120) utilise l'objet du meme nom dans la copie locale de l'ensemble standard (118). Si le nom de fichier n'est pas dans la liste de noms (122), le gestionnaire de documents extrait l'objet lie (163) au moyen de la totalite de la liaison imbriquee.

Main International Patent Class: G06F-013/00

Fulltext Availability:

Detailed Description

Detailed Description

... to browser 120, which creates downloaded document 160a.

Regardless of whether browser 120 obtained downloaded document 160a from memory cache 114, disk cache 116, or documents 160, at block 285 browser 120 parses the HTML in the document, displays whatever text is displayable, and identifies any linked objects that need further processing. At block 290, browser 120 checks whether there are any linked ...

10/5,K/51 (Item 41 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.

00426427 \*\*Image available\*\*

MANAGEMENT AND ANALYSIS OF DOCUMENT INFORMATION TEXT

GESTION ET ANALYSE DE TEXTE DE RENSEIGNEMENTS DE REFERENCE

Patent Applicant/Assignee:

MANNING & NAPIER INFORMATION SERVICES,

SNYDER David L,

CALISTRI-YEH Randall J,

Inventor(s):

SNYDER David L,

CALISTRI-YEH Randall J,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9816890 A1 19980423

Application: WO 97US18712 19971014 (PCT/WO US9718712)

Priority Application: US 9628437 19961015

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK

MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN

YU ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK

ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN

TD TG

Main International Patent Class: G06F-017/30

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 19986

English Abstract

An interactive system for analyzing and displaying information (Fig. 1A) contained in a plurality of documents employing both term-based analysis and conceptual-representation analysis (Fig. 9D). Particulars of the invention are especially effective for analyzing patent texts, such as patent claims, abstracts and other portions of a patent document.

French Abstract

L'invention a trait a un systeme interactif permettant d'analyser et d'afficher des renseignements (Fig. 1A) contenus dans une pluralite de documents en employant a la fois une analyse fondee sur les termes et une analyse de representation conceptuelle (Fig. 9D). Certains details de l'invention sont particulierement utiles pour l'analyse de textes de brevets, notamment des revendications, des abreges et d'autres parties d'un document relatif a un brevet.

Main International Patent Class: G06F-017/30

Fulltext Availability:

## Detailed Description

### Detailed Description

... is

detailed in flowchart 361 of Fig. 4B. Referring to Fig. 4B, the first step of such processing is dpfilter step 360 which removes unwanted **SGML**

delimited text. Following step 360, sfc-tagger step 370 uses a **part** of speech tagger to **parse** all **documents** one sentence at a time. Sfc step 380 identifies subject field codes and the weighting for each document.

Finally, step 390 creates a mapit.sfc...

10/5,K/52 (Item 42 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00393497 \*\*Image available\*\*

**COMPACT TREE FOR STORAGE AND RETRIEVAL OF STRUCTURED HYPERMEDIA DOCUMENTS**  
**ARBRE COMPACT POUR LE STOCKAGE ET L'EXTRACTION DE DOCUMENTS STRUCTURES**  
**HYPERMEDIA**

Patent Applicant/Assignee:

UNIVERSITY OF MASSACHUSETTS,

Inventor(s):

BUFORD John F,

RUTLEDGE John L,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9734240 A1 19970918

Application: WO 97US4574 19970317 (PCT/WO US9704574)

Priority Application: US 9613505 19960315; US 97792371 19970203

Designated States: AU CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Main International Patent Class: **G06F-015/00**

International Patent Class: **G06F-17:30**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 14882

### English Abstract

A compact tree representation is used during the electronic storage, transmission, and presentation of a **structured** hypermedia document (25) in a networked computer. All text **portions** of the **documents** are pre-processed by a **document parser** (30) and the resulting **document structure** is stored in compact and compressed form in a persistent object storage (31) while the document content (32) is available in a compressed and indexable form consistent with full text retrieval systems. During document delivery, the compact representation of the document (33, 39) is retrieved from the persistent object storage and transferred to a client computer (22), which reconstructs the document and presents it to a user (36). Any arbitrary **structured document** type can be stored and delivered this way. The CT representation can be partitioned dynamically or by preprocessing to allow the client to retrieve parts of the document incrementally, for non-linear or temporally ordered access. The CT representation can be used for group collaboration applications, including document sharing and document authoring applications.

### French Abstract

Une representation d'arbre compact est utilisee lors du stockage de la transmission et de la presentation electroniques d'un document structure hypermedia (25) dans un ordinateur de reseau. Toutes les portions texte des documents sont pretraitees par un analyseur syntaxique (30) de document et la structure de document obtenue est memorisee sous forme compacte et comprimee dans une memoire d'objets remanente (31), tandis que le contenu (32) du document est disponible sous une forme comprimee

et indexable qui est compatible avec les systemes d'extraction de texte complet. Pendant la phase de remise d'un document, la representation compacte du document (33, 39) est extraite de la memoire d'objets remanente et transferee a un ordinateur client (22) qui reconstruit les documents et les presente a un utilisateur (36). Tout type de document structure arbitraire peut etre memorise et fourni de cette facon. La representation CT peut se faire dynamiquement par fraction ou par pretraitement afin de permettre au client d'extraire des parties du document de maniere incrementielle, pour permettre un acces non-lineaire ou ordonne dans le temps. La representation CT peut etre utilisee pour des applications de collaboration en groupe, y compris le partage de documents et la determination d'un auteur d'un document.

Main International Patent Class: G06F-015/00

International Patent Class: G06F-17:30

Fulltext Availability:

Claims

#### English Abstract

A compact tree representation is used during the electronic storage, transmission, and presentation of a **structured hypermedia document** (25) in a networked computer. All text **portions** of the **documents** are pre-processed by a **document parser** (30) and the resulting **document structure** is stored in compact and compressed form in a persistent object storage (31) while the document content (32) is available in a compressed and indexable...

...from the persistent object storage and transferred to a client computer (22), which reconstructs the document and presents it to a user (36). Any arbitrary **structured document** type can be stored and delivered this way. The CT representation can be partitioned dynamically or by preprocessing to allow the client to retrieve parts...

#### Claim

... of receiving such structured document; and  
(b) a server computer that, upon receiving at least an initial receipt authorization from a client computer, retrieves the **structured document**, **parses** the **document** into a structural **portion** and a content portion, and thereafter  
sends at least some of the two portions to the client computer. I 2. The computer network of claim...

File 347:JAPIO Oct 1963-2002/Apr(Updated 020805)  
(c) 2002 JPO & JAPIO  
File 350:Derwent WPIX 1963-2002/UD,UM &UP=200249  
(c) 2002 Thomson Derwent  
File 348:EUROPEAN PATENTS 1978-2002/Aug W01  
(c) 2002 European Patent Office  
File 349:PCT FULLTEXT 1983-2002/UB=20020801,UT=20020725  
(c) 2002 WIPO/Univentio

Set	Items	Description
S1	2	AU='DEEN B J'
S2	28	AU='SODERBERG J':AU='SODERBERG J V'
S3	2	S1:S2 AND (XML OR MARK()UP OR MARKUP)

3/5/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

014581370 \*\*Image available\*\*  
WPI Acc No: 2002-402074/200243  
XRPX Acc No: N02-315221

Database query processing method involves wrapping database query  
according to markup language and transport protocol and outputting  
wrapped query

Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: LIPPERT L M; REDDY S V; SODERBERG J M  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6356906	B1	20020312	US 99360508	A	19990726	200243 B

Priority Applications (No Type Date): US 99360508 A 19990726

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6356906	B1		12	G06F-017/30	

Abstract (Basic): US 6356906 B1

NOVELTY - A database query structured according to a query language, is accessed. The database query is wrapped according to a **markup** language to indicate the start and stop of database query and to identify the query. The wrapped database query (306) is further wrapped according to a transport protocol and is output.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Computer program product for processing database query;
- (b) Computerized system

USE - For processing standard database queries such as structured query language (SQL) queries within hypertext transport protocols.

ADVANTAGE - The queries and responses exchanged among clients and servers are wrapped effectively according to transport protocols and **markup** languages.

DESCRIPTION OF DRAWING(S) - The figure shows the client-server system.

Wrapped database query (306)

pp; 12 DwgNo 3/3

Title Terms: DATABASE; QUERY; PROCESS; METHOD; WRAP; DATABASE; QUERY;  
ACCORD; LANGUAGE; TRANSPORT; PROTOCOL; OUTPUT; WRAP; QUERY

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

3/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.

014529428 \*\*Image available\*\*  
WPI Acc No: 2002-350131/200238  
XRPX Acc No: N02-274966

Access control method involves determining whether access source bit and  
underlying file system level bit are turned ON or OFF, to determine  
whether access to source is permitted

Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: DEEN B J ; TREADWELL D R  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6351748	B1	20020226	US 99361390	A	19990726	200238 B

Priority Applications (No Type Date): US 99361390 A 19990726

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

Abstract (Basic): US 6351748 B1

NOVELTY - A server determines whether access to source such as data, is permitted by determining whether an access source bit and an underlying file system level bit are turned OFF or ON. The data is output to the client from the server according to extensible mark - up language ( XML ) and hyper-text transport protocol (HTTP), if access to source is permitted.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) Server system;

(b) Recorded medium storing program for controlling access to resource

USE - For controlling file system level access to sources in server.

ADVANTAGE - Allows for client access to and specification of source of a resource and to response of resource. The ability to access both the source and the response of a resource, renders a HTTP for distributed authorizing of content.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the access control method.

pp; 13 DwgNo 2/4

Title Terms: ACCESS; CONTROL; METHOD; DETERMINE; ACCESS; SOURCE; BIT; UNDERLYING; FILE; SYSTEM; LEVEL; BIT; TURN; DETERMINE; ACCESS; SOURCE; PERMIT

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

15/5,K/9 (Item : from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2002 European Patent Office. All rts. reserv.

00542028

Method and apparatus for operating a computer-based file system  
Verfahren und Gerat um ein rechnergestutztes Dateiensystem zu betreiben  
Procede et dispositif pour operer un systeme de fichiers base sur  
ordinateur

PATENT ASSIGNEE:

AT&T Corp., (589370), 32 Avenue of the Americas, New York, NY 10013-2412,  
(US), (Proprietor designated states: all)

INVENTOR:

Bauer, Eric Jonathan, 53 Lenape Trail, Tinton Falls, New Jersey 07724,  
(US)

LEGAL REPRESENTATIVE:

Harding, Richard Patrick et al (41295), Marks & Clerk, Nash Court, Oxford  
Business Park South, Oxford OX4 2RU, (GB)

PATENT (CC, No, Kind, Date): EP 526035 A2 930203 (Basic)  
EP 526035 A3 940119  
EP 526035 B1 990915

APPLICATION (CC, No, Date): EP 92306429 920714;

PRIORITY (CC, No, Date): US 735394 910724

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30

CITED PATENTS (EP A): EP 394172 A

CITED PATENTS (EP B): EP 394172 A

CITED REFERENCES (EP A):

IBM TECHNICAL DISCLOSURE BULLETIN. vol. 33, no. 9 , February 1991 , NEW  
YORK US pages 182 - 183 I.B.M. CORPORATION 'Use of subfiles as an  
internal organization method';

CITED REFERENCES (EP B):

IBM TECHNICAL DISCLOSURE BULLETIN. vol. 33, no. 9 , February 1991 , NEW  
YORK US pages 182 - 183 I.B.M. CORPORATION 'Use of subfiles as an  
internal organization method';

ABSTRACT EP 526035 A2

A computer-based file system includes files which may have one or more  
data streams associated therewith. The files are accessed using a base  
name and the associated data stream(s) are accessed using a prefix and/or  
a suffix of the base name. For example, the base name may be used to  
select a data file while the prefix and/or suffix may be used to access  
data streams which, illustratively, may include information used by the  
file system in the processing of the data file. Using this file naming  
structure enables the file system to handle the base name file and its  
associated data streams together as one file using the standard file  
commands.

ABSTRACT WORD COUNT: 114

NOTE:

Figure number on first page: NONE

LEGAL STATUS (Type, Pub Date, Kind, Text):

Oppn None: 000830 B1 No opposition filed: 20000616  
Application: 930203 A2 Published application (A1with Search Report  
;A2without Search Report)  
Search Report: 940119 A3 Separate publication of the European or  
International search report  
Change: 940223 A2 Representative (change)  
\*Assignee: 940622 A2 Applicant (name, address) (change)  
Examination: 940907 A2 Date of filing of request for examination:  
940707  
Change: 980107 A2 Representative (change)  
Examination: 990317 A2 Date of despatch of first examination report:  
990129  
Change: 990414 A2 International patent classification (change)  
Grant: 990915 B1 Granted patent  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Lang	Update	Word Count
CLAIMS B	(English)	9937	438
CLAIMS B	(German)	9937	413
CLAIMS B	(French)	9937	549
SPEC B	(English)	9937	4845
Total word count - document A			0
Total word count - document B			6245
Total word count - documents A + B			6245

INTERNATIONAL PATENT CLASS: G06F-017/30

...SPECIFICATION may have several path names, all of which map into the inode. Each path name is called a link. When a process refers to a file by path name, the kernel **parses** the path name one file name component at a time, checks that the process has permission to search the directories in the path, and eventually retrieves the inode for the file. For example, if a...link system calls. Because the kernel 130 works internally with vnodes rather than with path names, it converts the path names to vnodes to access files. An algorithm of the UNIX system kernel **parses** the path name one file name component at a time, converting each component into a vnode based on its name and the directory being searched, and eventually returns the vnode of the input path name...

15/5,K/10 (Item 10 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
 (c) 2002 European Patent Office. All rts. reserv.

00487071

**Electronic document editing system**  
**Elektronisches Dokumentenaufbereitungssystem**  
**Systeme electronique d'edition de documents**

PATENT ASSIGNEE:

XEROX CORPORATION, (219783), Xerox Square, Rochester, New York 14644,  
 (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Bier, Eric A., 191 Pine Lane, Los Altos, CA 94022, (US)

LEGAL REPRESENTATIVE:

Reynolds, Julian David et al (76302), Rank Xerox Ltd Patent Department  
 Parkway, Marlow Buckinghamshire SL7 1YL, (GB)

PATENT (CC, No, Kind, Date): EP 472444 A2 920226 (Basic)  
 EP 472444 A3 931201  
 EP 472444 B1 980812

APPLICATION (CC, No, Date): EP 91307810 910823;

PRIORITY (CC, No, Date): US 573512 900824

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/21 ; G06F-003/033 ; G06F-009/44

CITED REFERENCES (EP A):

DATABASE vol. 12, no. 4, August 1989, US pages 62 - 66 S.K. KINNELL  
 'Hypertext on the PC: Guide, Version 2.0'

PROCEEDINGS. 1990 INTERNATIONAL CONFERENCE ON COMPUTER LANGUAGES. 12-15  
 MARCH 1990, NEW ORLEANS, US pages 23 - 32 , XP000289118 W.J. HANSEN  
 'Enhancing documents with embedded programs: How Ness extends insets in  
 the Andrew Toolkit';

ABSTRACT EP 472444 A2

An electronic document editing system is provided for allowing users to impart various types of button behavior to ordinary human interpretable elements of electronic documents by associating hidden persistent character string button attributes to such elements. The system permits such buttons to be edited and searched through the use of the edit and search routines that are ordinarily provided by standard document editors.

The system comprises at lease one document editor (11), a button classes manager (13), command handlers (14), and a centralized kernel (12). Under the control of the user, the editor (11) can operate in either a "button-off" or a "buttons-on" mode. In the " button-off" mode,



the editor (11) executes all of the input commands it receives to carry out its normal editing operations. In the "button-on" mode, the editor examines selected document elements to determine if they have button attributes and routes certain input commands to the centralized kernel (12). The kernel (12) reads the button attribute character strings, and establishes communications between the editor (11), an appropriate button handler in the button class manager (13) and the appropriate command handler (14) so that the action described in the button is carried out.  
(see image in original document)

ABSTRACT WORD COUNT: 204

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 920226 A2 Published application (A1with Search Report  
;A2without Search Report)  
Search Report: 931201 A3 Separate publication of the European or  
International search report  
Examination: 940803 A2 Date of filing of request for examination:  
940601  
Examination: 961211 A2 Date of despatch of first examination report:  
961029  
Change: 970702 A2 Representative (change)  
Grant: 980812 B1 Granted patent  
Oppn None: 990804 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9833	395
CLAIMS B	(German)	9833	371
CLAIMS B	(French)	9833	474
SPEC B	(English)	9833	13108
Total word count - document A			0
Total word count - document B			14348
Total word count - documents A + B			14348

INTERNATIONAL PATENT CLASS: G06F-017/21 ...

... G06F-003/033 ...

... G06F-009/44

...SPECIFICATION parsing every time the button is triggered, but this would adversely affect performance. Instead, the editor can call the DataStructureFromAttribute routine once for each button at the time that the document is loaded. This routine parses the button attribute, builds a data structure to represent the button and returns this data structure to the editor. The editor can then store this...

15/5,K/29 (Item 17 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00510536 \*\*Image available\*\*

SYSTEM AND METHOD FOR CONTROLLING ACCESS TO STORED DOCUMENTS  
SYSTEME ET PROCEDE POUR CONTROLER L'ACCES AUX DOCUMENTS STOCKES

Patent Applicant/Assignee:

SECURE COMPUTING CORPORATION,

Inventor(s):

VIETS Richard R,  
MOTES David G,  
GREVE Paula Budig,  
HERBERG Wayne W,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9941888 A1 19990819  
Application: WO 99US3382 19990217 (PCT/WO US9903382)  
Priority Application: US 9824576 19980217

Designated States: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
Main International Patent Class: H04L-029/06

International Patent Class: G06F-001/00  
Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 10751

English Abstract

A system and method of limiting access from an external network to documents stored on an internal network. A client list is built in which each client is assigned to one or more roles. Each role has access to one or more documents as defined on a document list. A request from an external network is reviewed and, if possible, the request is associated with a client on the client list. The requested document is then compared to the document list associated with the client's role and, if the requested document is in the list of documents available to a client in the client's role, the requested document is fetched, cleaned and sent to the client.

French Abstract

L'invention concerne un systeme et un procede destines a limiter l'accès depuis un reseau externe aux documents stockes dans un reseau interne. On dresse une liste de clients dans laquelle un ou plusieurs roles sont attribues a chaque client. Chaque role dispose de l'accès a un ou a plusieurs documents, selon les definitions d'une liste de documents. On examine une demande provenant d'un reseau externe et, si possible, on associe la demande a un client sur la liste de clients. Le document demande est ensuite compare a la liste de documents associee au role du client. Si le document demande figure sur la liste des documents mis a la disposition d'un client dans un role donne du client, le document demande est lu en memoire, nettoye et envoye au client.

International Patent Class: G06F-001/00  
Fulltext Availability:  
Detailed Description

Detailed Description

... the server is written out line by line into the map file again. After this is done, the server deletes the prior Go List and **parses** through the map file a line at a time determining if that line is allowed. If the line is allowed the real-url part of the Map line is added (minus the I 0...

15/5,K/30 (Item 18 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00500224 \*\*Image available\*\*

COMBINING MULTIPLE CLASS FILES INTO RUN-TIME IMAGE

COMBINAISON DE FICHIERS DE CLASSES MULTIPLES EN IMAGE EXECUTEE

Patent Applicant/Assignee:

MICROSOFT CORPORATION,

Inventor(s):

SAUNTRY David M,

MARKLEY Michael E,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9931576 A1 19990624

Application: WO 98US26753 19981216 (PCT/WO US9826753)

Priority Application: US 97991500 19971216

Designated States: CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Main International Patent Class: G06F-009/00

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 6849

## English Abstract

Combining multiple Java class files into a run-time image is disclosed. The run-time image of the Java class files is such that class files are in a preloaded and prepared state for a Java virtual machine. Desirably, the run-time image is a DLL file stored in read-only memory (ROM), and comprises non-redundant data.

## French Abstract

La presente invention decrit la combinaison de fichiers de classes Java multiples en image executee. L'image executee des fichiers de classes Java est telle que les fichiers de classes sont charges et analyses d'avance pour une machine Java virtuelle. De preference, l'image executee est un fichier DLL stocke en memoire morte (ROM) et contient des donnees non redondantes.

Main International Patent Class: G06F-009/00

Fulltext Availability:

Detailed Description

## Detailed Description

... been designed so that software implementations 5 of the run-time system are able to optimize their performance by compiling bytecode to native machine code on the fly. A class file is loaded and **parsed**, such that it is compiled on a "just in time" basis at run-time. Thus, when a Java program is run by a Java virtual machine, there are ultimately two versions of necessary class files: the,byte-code versions...

...5 memory as and have slower processors than, for example, desk-top computers running Microsoft Windows NT. First, the typical Java program uses many class files, such that loading and **parsing** these class files at run-time takes a long time on a less powerful processor. For example, it has been found that running a simple "Hello World" program - e.g., a ...

...take more than nine minutes to execute on a handheld device having a processor running at about forty megahertz, because of the initial loading and **parsing** of class files at run-time.

One aspect of this initial loading and **parsing** is frequently the translation of the byte codes of the Java class files from big endian format to little endian format. That is, byte codes...For memory-constrained devices, this is burdensome.

There is a need, therefore, for a solution that overcomes these disadvantages and shortcomings of the loading and **parsing** of Java class files at run-time by a Java virtual machine, so that Java programs may realistically be more able to run on memory-constrained and slower platforms such as handheld...

...separate utility that preloads and prepares a given collection of Java class files, such that the Java virtual machine does not have to load and **parse** the files at run-time, but instead can rely on the run-time image itself. Desirably, this includes translating the byte codes of the Java class files from big...more 1 5 specifically, Java Development Kit 1.3, or JDK 1.1.3), a thirty-percent reduction in size of the run-time image file as compared to the prior art loading and **parsing** of class files at run-time may be achieved in some instances.

Third, the run-time image is the only version of the Java class files that is needed within a...

...the prior art two versions of the class files exist, the first in an unloaded and unparsed state, and the second in a loaded and **parsed** state at run-time, and where often these two versions of the class

files both exist. In fact, by comparison, under the invention, there is only one version of the class files. Oust the loaded and parsed 2 5... according to one embodiment of the invention, is shown in FIG. 2(b).

Referring first to FIG. 2(a), in accordance with the prior art, at run-time the Java virtual machine 200 loads and parses the Java class files 202 into RAM 204. The Java class files 202 are those class files including those that are 2 0 necessary for the execution of a...the class initializer is executed.

1 5 These classes are marked as initialized, and execution continues. This bypasses the time-consuming procedure of loading and parsing the class files at run-time, as occurs in the prior art. Note that if a new class is not found, then a normal search for the class file is started...

15/5,K/31 (Item 19 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00480755 \*\*Image available\*\*  
METHOD AND DEVICE FOR PARSING NATURAL LANGUAGE SENTENCES AND OTHER  
SEQUENTIAL SYMBOLIC EXPRESSIONS  
PROCEDE ET DISPOSITIF D'ANALYSE DE PHRASES DE LANGAGES NATURELS ET AUTRES  
EXPRESSIONS SYMBOLIQUES SEQUENTIELLES

Patent Applicant/Assignee:

BRASH Douglas E,

Inventor(s):

BRASH Douglas E,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9912107 A1 19990311

Application: WO 98US17865 19980828 (PCT/WO US9817865)

Priority Application: US 97922494 19970903

Designated States: AU CA CN IL JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
MC NL PT SE

Main International Patent Class: G06F-017/27

International Patent Class: G10L-003/00

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 11756

#### English Abstract

A parsing method and apparatus for symbolic expressions of thought such as English-language sentences is provided. The basic procedure distinguishes only between symbols for pictures (such as "squirrel" or "justice") and symbols for relations (such as "above" or "pushed"). For example, to the cognitive parser, the sentences "The squirrel buried a nut" and "My aunts sent a telegram" are equivalent. The parser thus operates at a level more basic than syntactic parsing, making it simpler. The illustrative embodiment, a cognitive parser for English sentences, comprises: a microprocessor (3), a stored lexicon (7) including symbols and associated entity-types (picture or relation), an input device (1) for a symbol sequence (2), and a procedure (4) executing on the microprocessor for grouping the inputted symbols according to the rules based on entity type. A method comprising operation of the cognitive parser is also provided.

#### French Abstract

Cette invention est un procede, ainsi qu'un appareil, permettant l'analyse d'expressions symboliques de la pensee telles que des phrases en langue anglaise. La procedure de base ne permet de distinguer qu'entre symboles d'images (tels que "i(squirrel)" ou "i(justice)") et les symboles de relations (tels que "i(above)" et "i(pushes)"). Par exemple, pour l'analyseur cognitif les phrases "i(The squirrel buried a nut)" et "i(My aunts sent a telegram)" sont equivalentes. L'analyseur opere donc a

un niveau plus pratique que l'analyse syntaxique, ce qui est plus simple. La réalisation retenue, en l'occurrence un analyseur cognitif de phrases anglaises, comprend: un microprocesseur (3), un lexique memorise (7) incluant des symboles et des types d'entites associes (image ou relation), un organe d'entree (1) pour une sequence de symboles (2), et une procedure (4) s'exécutant au niveau du microprocesseur de facon a prendre les symboles fournis en entree et les regrouper en respectant des regles fonction du type d'entite. L'invention concerne egalement un procede sollicitant cet analyseur cognitif.

Main International Patent Class: G06F-017/27

Fulltext Availability:

Detailed Description

Detailed Description

... decision made by step 160, the remaining words of the sentence are processed into subtrack+2.

Operation of Invention: FIGS. 1-12

The cognitive **parser** reads a sentence, or other symbolic expression of thought, one symbol at a time. The **parser**'s **structure** (FIGS. 1-10) results in a series of procedures that enact the cognitive rules (Terminology). The result is a sentence or other expression that has...

15/5,K/36 (Item 24 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.

00248444

COMPUTER METHOD AND APPARATUS FOR A TABLE DRIVEN FILE PARSER

PROCEDE ET APPAREIL INFORMATISES POUR UN ANALYSEUR SYNTAXIQUE DE FICHIER

GERE PAR TABLE

Patent Applicant/Assignee:

WANG LABORATORIES INC,

Inventor(s):

METHE Edward D,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9322734 A1 19931111

Application: WO 93US732 19930127 (PCT/WO US9300732)

Priority Application: US 92877409 19920501

Designated States: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-015/403

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9166

English Abstract

An interface between different file formats employs a table for parsing component parts of each file format. The table cross references or categorizes each of the different file formats according to file type from a predefined set of file types. For each file type, the table provides an indication and description of each component part of a file of that type. Each component part description of the table is in a common format. Thus, the present invention method and apparatus employs a table driven parser which utilizes a common form of representation for defining multiple file formats.

French Abstract

Une interface entre differents formats de fichiers utilise une table pour analyser les parties constitutives de chaque format de fichier. La table etablit des correspondances croisees pour chacun des differents formats de fichiers, ou les categorise en fonction du type de fichier, a partir d'un ensemble predefini de types de fichiers. Pour chaque type de fichier, la table fournit une indication et une description de chaque partie constitutive d'un fichier de ce type. Chaque description d'une partie constitutive de la table se presente sous un format commun. Ainsi,

le procede et l'ajout de la presente invention comprennent  
l'utilisation d'un analyseur syntaxique gere par table qui utilise une  
forme commune de representation pour definir des formats de fichiers  
multiples.

Main International Patent Class: G06F-015/403

Fulltext Availability:

Detailed Description

Detailed Description

... calling application 15 one cell or column at a time. In the second  
option, interface 21 accesses the target file, and passes any and all  
file records back to the calling application 15 one record at a  
time without parsing or extracting any of the data. In this instance,  
the calling application

File 275:Gale Group Computer DB(TM) 1983-2002/Aug 09  
(c) 2002 The Gale Group  
File 47:Gale Group Magazine DB(TM) 1959-2002/Aug 08  
(c) 2002 The Gale group  
File 621:Gale Group New Prod.Annou.(R) 1985-2002/Aug 09  
(c) 2002 The Gale Group  
File 636:Gale Group Newsletter DB(TM) 1987-2002/Aug 09  
(c) 2002 The Gale Group  
File 16:Gale Group PROMT(R) 1990-2002/Aug 09  
(c) 2002 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 148:Gale Group Trade & Industry DB 1976-2002/Aug 09  
(c)2002 The Gale Group  
File 624:McGraw-Hill Publications 1985-2002/Aug 08  
(c) 2002 McGraw-Hill Co. Inc  
File 98:General Sci Abs/Full-Text 1984-2002/Jun  
(c) 2002 The HW Wilson Co.  
File 553:Wilson Bus. Abs. FullText 1982-2002/May  
(c) 2002 The HW Wilson Co  
File 88:Gale Group Business A.R.T.S. 1976-2002/Aug 09  
(c) 2002 The Gale Group  
File 15:ABI/Inform(R) 1971-2002/Aug 09  
(c) 2002 ProQuest Info&Learning  
File 635:Business Dateline(R) 1985-2002/Aug 09  
(c) 2002 ProQuest Info&Learning  
File 9:Business & Industry(R) Jul/1994-2002/Aug 08  
(c) 2002 Resp. DB Svcs.  
File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 647:CMP Computer Fulltext 1988-2002/Aug W2  
(c) 2002 CMP Media, LLC  
File 674:Computer News Fulltext 1989-2002/Jul W3  
(c) 2002 IDG Communications  
File 696:DIALOG Telecom. Newsletters 1995-2002/Aug 08  
(c) 2002 The Dialog Corp.  
File 369:New Scientist 1994-2002/Jul W2  
(c) 2002 Reed Business Information Ltd.  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 634:San Jose Mercury Jun 1985-2002/Aug 08  
(c) 2002 San Jose Mercury News  
File 370:Science 1996-1999/Jul W3  
(c) 1999 AAAS  
File 613:PR Newswire 1999-2002/Aug 09  
(c) 2002 PR Newswire Association Inc  
File 610:Business Wire 1999-2002/Aug 09  
(c) 2002 Business Wire.

Set	Items	Description
S1	132609	XML OR EXTENSIBLE() (MARKUP OR MARK()UP)
S2	569732	HTML OR SGML OR XHTML OR DHTML OR VRML OR VIRTUAL()REALITY- ()MODELING()LANGUAGE OR (MARKUP OR MARK()UP)()LANGUAGE? ? OR - (STRUCTURED OR WEB) (1W) (FILE OR FILES OR DOCUMENT? ?)
S3	325	PARS?(3N) (PART? ? OR PARTIAL? OR PORTION? OR PIECE?? OR PI- ECEMEAL OR SECTION? OR FRAGMENT?? OR SEGMENT?? OR BLOCK? ? OR ELEMENT? ? OR UNIT OR UNITS OR COMPONENT? ?) (3N) (DOCUMENT? ? - OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S4	75657	S1:S2 (3W) (DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE OR STRUCTURE)
S5	13198391	(PART? ? OR PARTIAL? OR PORTION? ? OR PIECE? ? OR PIECEMEAL OR SECTION? ? OR FRAGMENT? ? OR SEGMENT? ?)
S6	345	S4 (3N) S5 (3N) (CONSTRUCT? OR BUILD? OR PREPAR? OR ASSEMBL? OR CREAT? OR MAK??? OR FORM??? OR FORMATION? ? OR ARRANG? OR OR- GANIZ? OR ORGANIS? OR PUT????()TOGETHER)
S7	103	PARS?(5N) (REAL()TIME OR ADAPTIV? OR ON(1W)FLY OR GRADUAL? - OR AT(1W)TIME OR AFTER(1W) (OTHER OR NEXT) OR LITTLE(1W)LITTLE- ) (5N) (DOCUMENT? ? OR PAGE? ? OR FILE? ? OR RECORD? ? OR TREE -

```

OR STRUCTURE)
S8      121    S3(S)S1:S2 OR S3(100N)S1:S2
S9      61     RD (unique items)
S10     54     S9 NOT PY=2001:2002
S11     123    S6(S)S1 OR S6(100N)S1
S12     55     RD (unique items)
S13     29     S12 NOT (PY=2001:2002 OR S10)
S14     31     S7(S)S1:S2 OR S7(100N)S1:S2
S15     17     RD (unique items)
S16     15     S15 NOT (S10 OR S13)
S17     59     (OBJECT? ?(10N)BUFFER? ?)(S)NETWORK?
S18     38     RD (unique items)
S19     35     S18 NOT PY=2001:2002
S20     16     OBJECT? ?(S)BUFFER? ?(S)THRESHOLD? ?
S21     14     RD (unique items)

```



10/9/3 (Item 3 from File: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2002 The Gale Group. All rts. reserv.

02440360 SUPPLIER NUMBER: 65845328 (THIS IS THE FULL TEXT)  
**DATABASES THAT FOCUS ON THE NET -- Updated versions of relational database management systems from IBM and Microsoft are Internet-aware, helping companies do business over the Net, but the capabilities included make the offerings appropriate for different customers. (Product Information)**  
Ferrill, Paul  
InformationWeek, 151  
Oct 9, 2000  
ISSN: 8750-6874 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2570 LINE COUNT: 00206

ABSTRACT: IBM's DB2 Universal Database 7.1 and Microsoft SQL Server 2000 DBMS, both come with enhancements to enable companies to do e-business. IBM's product has components such as DB2 Net Search Extender for high-speed searching as well as scripting functionality. A new technology called Data Links makes any type of data in the file system appear as if it is a table in a normal table in a database. Microsoft SQL Server 2000 has its primary focus on Web enablement. The product fully embraces standards such as XML and enables easier accessibility of data over standard protocols such as HTTP.  
TEXT:

Microsoft and IBM have recently delivered versions of their flagship relational database management systems with new features and capabilities that focus on helping companies do business over the Internet.

A relational database management system serves as the platform upon which to build the other components of the business-processing engine. The chosen system should be interoperable, reliable, and scalable, as well as being easy to administer and use. In serving as a platform for an E-business solution, it should also be Internet-aware.

IBM's focus for its DB2 Universal Database 7.1 encompasses specific improvements aimed at E-business, including DB2 Net Search Extender for high-speed searching, and Net.Data scripting functionality. Net Search Extender adds a number of search tools, such as fuzzy search, stemming, section search, and Boolean search, designed to deliver fast results for Internet indexes.

IBM's approach to data that resides outside the database differs from that of its competitors. DB2 7.1 includes a new technology called Data Links that makes any type of data in the file system look just like it's a table in a normal database. Data Links establishes the linkage and maintains referential integrity with data stored in the file system, so that normal SQL queries can be performed. The previous release doesn't support updating external data in place.

This method is in contrast to Oracle's Internet File System, in which everything is part of the database and there's no local file system. The Oracle system stores everything as an object in the database and can search through unstructured text data such as HTML pages and documents.

The primary focus for Microsoft SQL Server 2000 is Web enablement. To Microsoft, "Web-enabled" means fully embracing Internet standards such as the Extensible Markup Language and related technologies. Microsoft has also made data more accessible over standard Web protocols such as HTTP. This feature is important to Web developers because it makes it possible to communicate with the database over the same protocol by which Web pages are delivered. This same communication can be encrypted using Secure Sockets Layer and won't be rejected by company firewalls that stop other protocols in their tracks.

Business Internet Analytics is a concept coined by Microsoft a while back that, in essence, means analyzing Internet browsing trends. SQL Server 2000 serves as a repository of Web interactions or clickstream data that, in turn, can be analyzed to determine customers' browsing patterns and help pinpoint Web-site bottlenecks.

There's no question that the impact of the Internet has caused all major software vendors to rethink their product strategies. XML is one of the primary areas that all the major database vendors have scrambled to embrace. Why is XML so important? XML facilitates communication between

systems that normally can't speak the same language. Because of its self-describing nature, XML provides a way to pass information between dissimilar systems with some level of confidence that it will be properly interpreted on the other end. Direct XML support in the database means there's no need for any other tool to translate data from an external provider into something that can be used immediately.

Microsoft has taken aggressive steps to make XML an integral part of SQL Server 2000. New SQL functions such as the FOR XML clause directly returns XML data from a SELECT query. The OPENXML T/SQL keyword provides a relational view of XML data that can be joined with other existing relational tables in the database. XML views let users access relational tables as if they were XML documents. You can also use XML to directly update a database. All these features make it possible to completely drive the database from an XML basis.

XML is also the language of choice for other Microsoft offerings, such as BizTalk Server, the release of which has been pushed back to next year, and Commerce Server. SQL Server 2000 will function as a key backbone piece of Microsoft's .Net architecture. SQL Server 2000 supports XML Path Language queries, which give the developer the ability to access the database over HTTP using a URL address. The XPath standard is a World Wide Web Consortium recommendation that's now in the approval process.

IBM's XML support for DB2 includes the ability to parse XML documents into specific parts stored in DB2 tables. The DB2 XML Extender provides the ability to store an entire XML document or only specific pieces in the database. Users then can retrieve all or part of the document. At the same time, IBM has wrapped its arms around Java as an additional way to program the database.

IBM offers a SQLJ package that lets users create and run embedded SQL for Java applications bound to a DB2 database. DB2 also supports stored procedures written in Java. IBM's Net.Data scripting language now provides XML output and XHTML compatibility.

IBM and Microsoft paint a bright picture of the integration capabilities of their products. DB2 integrates exceptionally well with other IBM products as well as with third-party applications using its database connector technology. IBM includes a number of other products with the Enterprise Edition of DB2, including WebSphere Studio, WebSphere Application Server, VisualAge for Java, and various connector tools. The Enterprise version of WebSphere ships with a copy of DB2. The bundling of these development tools and application platforms provides all the functionality necessary to build and deploy Web apps right out of the box.

Microsoft introduced a number of new features in SQL Server 7.0 that added tight integration with Microsoft's Office productivity suite. SQL Server 2000 adds to that functionality tight integration with Microsoft's BizTalk line of products. SQL Server acts as the data repository for Commerce Server's catalog functionality. Commerce Server is Microsoft's E-business platform for delivering shopping functions that use a catalog-based approach. SQL Server 2000 is also tightly integrated to the Windows 2000 server architecture, including Active Directory Services. ADS replaces the old NT-domain security model with one based on the Lightweight Directory Access Protocol and the domain name system. This level of integration makes the task of security administration across the enterprise easier using Active Directory Services.

DB2 presents a multitude of options for developing applications. Typical E-business applications would most likely contain some combination of HTML and Java code. Running these applications would require the WebSphere platform. WebSphere Studio provides the tools necessary to build and deploy a complete Web application. VisualAge for Java is a complete integrated development environment for constructing Java applications.

Microsoft's Web-development solution at present would require a combination of its Internet Information Server and code written for Active Server Pages. Visual Studio includes a tool called Visual Interdev that makes developing sophisticated Active Server Pages code very simple. The current version of Visual Studio, Microsoft's integrated software development platform, offers tight integration with SQL Server 7.0 and SQL Server 2000.

While IBM's VisualAge platform provides a good set of features, Visual Studio is the standard by which other products are judged. IBM even provides a set of Visual Studio add-ins to make it easier to build apps

that use DB2 as their target database. Future versions of Visual Studio will track the Microsoft.Net initiative and Microsoft's line of server products, promising an even greater level of Web support.

Microsoft raised the bar in the area of online analytical processing with the release of SQL Server 7.0. SQL Server 2000 extends the reach of OLAP by making it possible to browse cubes over the Web using HTTP. Integrated data mining is also new to SQL Server 2000 and ties in closely with the OLAP features. New constructs such as DISTINCT COUNT and DISCOUNT COUNT were specifically added to facilitate Web traffic analysis.

Data warehouses gather large quantities of data with the goal of looking for specific patterns. For sales data, it might be finding out how many items were sold on a particular day in response to some specific advertising or more general questions. Determining the answers to these questions becomes a matter of searching through and summarizing the available data.

OLAP tools typically use real-time or historical data to attempt to draw conclusions based on real information. The set of data needed to generate the answers can either be stored outside the main warehouse database or in a special section often called a cube because of the shape of the intersection of multivariable queries.

IBM has recognized the importance of OLAP and has also delivered new features in DB2 7.1 that were formerly available for an additional charge. Visual Warehouse was previously sold as a separate tool targeted specifically at building and managing a data warehouse. The functionality of Visual Warehouse, which helps automate the process of gathering, extracting, transforming, and then storing data, has been brought into the main DB2 product. All versions of DB2, except for the lower-end client connect versions, include the OLAP starter kit. IBM charges extra for its full OLAP capability but does deliver a limited version it calls the OLAP starter kit.

IBM and Microsoft both have expended a lot of time and effort trying to get the reliability and scalability issues right. SQL Server 2000 is, by design, tied to the Windows 2000 operating system. That means you'll have to live with a single operating system, and any potential problems with that operating system, should you choose SQL Server 2000.

The close ties to the operating system present advantages in areas such as Microsoft's clustering technology. There's also full support for storage area networks, allowing the database to bypass the CPU and talk directly to the network. Benefits to this technique include faster database access and significant increases in overall database performance. Microsoft is working closely with third parties, including EMC Corp. and Compaq, on features such as serverless snapshot backups.

Scalability must be addressed from two perspectives: performance and size. Both companies rely on the underlying hardware and operating system to deliver the raw computing power needed to scale in terms of performance. DB2 will run on IBM's most powerful mainframe systems, providing orders of magnitude more performance than you would ever get on a Windows machine. Both products address essentially the same amount of data, making size a non-issue.

SQL Server 2000 and DB2 offer automated performance and tuning utilities that analyze a running database server and make adjustments to help it run faster. While the tools accomplish the same task, they go about it in slightly different ways. DB2 uses a cost-based algorithm to optimize the more critical items of the user's choosing. SQL Server 2000 attempts to match a pattern of database activity to that of a known workload and then react accordingly.

IBM has made great strides in optimizing its product to take advantage of the strengths of each platform on which it runs. While most of the code base for each different platform is essentially the same, a small portion of the code is reserved to deal with hardware differences. It's in these platform-specific areas that IBM seeks to get a big lift in performance. It appears to be paying off, as IBM has won a number of database duels and has taken on the Transaction Processing Performance Council suite of database-performance tests with great enthusiasm. The TPC tests attempt to measure the performance of a database program in performing very specific tasks such as insert queries.

Both companies have made improvements to address the pressing need to bring new applications online faster. IBM has taken great care in

delivering DB2 with tools and documentation to make the process of migrating from another database platform as painless as possible. One noticeable area is its attention to specific details such as expanding the maximum SQL statement size to help alleviate problems that could potentially derail any automated translation attempt. It has also provided a free migration tool to assist in the process. DB2 fully supports the SQL-99 standard while also providing extensions that make sense.

SQL Server 7.0 excels in the area of administration tools. Microsoft used its expertise in user interfaces and utilities to make it a lot easier to administer a large database. SQL Server 2000 expands on that same theme with enhancements and features to make the database administrator's job even easier. Microsoft's T-SQL tool includes a new integrated debugger that makes it possible to do server-side tracing and client-side statistics.

It used to be said that price wasn't a factor in the high-end database market. It was pretty much a given that the products were expensive--and many also carried hefty monthly maintenance costs. Microsoft's aggressive pricing for SQL Server wasn't really a problem until the product started encroaching on the territory of traditional players such as IBM and Oracle. Vendors are now rethinking their pricing models and coming out with new plans that address issues such as application service providers and per-CPU costs instead of per-user.

IBM has introduced a per-subscriber and per-transaction pricing scheme with this version of DB2 in an attempt to attract ASP customers that want to host database services. It also has an aggressive partner program called ASP Prime that focuses on helping new ASPs get up and running quickly. IBM has an advantage because it can sell both hardware and software to ASPs through this program to offer their customers one-stop shopping. IBM has also adopted the per-CPU pricing model for customers, a known fixed cost for which they can budget. Microsoft traditionally has sold SQL Server on a per-user basis, but with SQL Server 2000, it has also adopted the per-CPU model.

With their respective new releases, IBM and Microsoft are trying to demonstrate that their products are well-positioned as cornerstones for building Web applications. Both products have their strong points. The Web features in SQL Server 2000 will appeal to developers looking for ways to get around current limitations in accessing their data. SQL Server 2000 offers full OLAP capabilities in the base product for data warehouse and data mining applications. DB2 will appeal to customers who need a multiplatform database that works on high-end computers.

For current users, the new features and capabilities should justify the cost of upgrading. Otherwise, you'll have to weigh your needs and choose the product that presents the least amount of risk in meeting your company's goals.

Paul Ferrill is a principal engineer for Avionics Test and Analysis Corp. at Edwards Air Force Base, Calif. He can be reached at pferrill@fwb.gulf.net.

<http://www.iweek.com/>

Copyright (copyright) 2000 CMP Media Inc.

COPYRIGHT 2000 CMP Media, Inc.

COMPANY NAMES: International Business Machines Corp.--Products; Microsoft Corp.--Products

GEOGRAPHIC CODES/NAMES: 1USA United States

DESCRIPTORS: Product description/specification; DBMS

EVENT CODES/NAMES: 330 Product information

PRODUCT/INDUSTRY NAMES: 7372421 (DBMS)

SIC CODES: 7372 Prepackaged software

NAICS CODES: 51121 Software Publishers

TICKER SYMBOLS: IBM; MSFT

TRADE NAMES: DB2 Universal Database 7.1 (DBMS)--Design and construction;

Microsoft SQL Server 2000 (DBMS)--Design and construction

FILE SEGMENT: CD File 275

10/9/10 (Item 10 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group. All rts. reserv.

02374950 SUPPLIER NUMBER: 59599941 (THIS IS THE FULL TEXT)

Webwriter. (from Stilo Technologies) (Product Announcement)

Internet Magazine, 131

Feb, 2000

DOCUMENT TYPE: Product Announcement

ISSN: 1355-6428

LANGUAGE:

English RECORD TYPE: Fulltext

WORD COUNT: 897 LINE COUNT: 00077

TEXT:

This XML editor from Stilo is excellent for creating documents for the Web

As the markup language of the Web, HTML has, until now, been used for designing the Layout and formatting of text and image data. But with Web applications spreading into diverse areas and demanding powerful tools, a more adaptable language was needed.

This was achieved in early 1998, when W3C (the World Wide Consortium at [www.w3c.org](http://www.w3c.org)) released a new language, called eXtensible Markup Language, to overcome the rigidity of HTML.

While the only browser currently supporting XML is IE5, the other main players will be introducing fully compliant browsers in the near future. In the meantime, you can start to familiarise yourself with the programming intricacies of XML with Webwriter.

It's one of the first XML editors on the market and comes from Stilo ([www.stilo.com](http://www.stilo.com)). Webwriter is a robust program, but it appears to have literally rolled off the beta test line considering the bare functionality of the workspace. The program lets you prepare all the elements of an XML document- including the DTD (Document Type Description) - and output the document as either XML or HTML.

A tour of the package using your browser in both HTML and XML takes you through all the aspects of designing valid and well formed documents. Webwriter has some particularly useful features, including partial parsing and document content validation. Full parsing of documents is only carried out when the document is loaded, though.

The tour shows you basic XML document design using a telephone message system as an example. This includes assigning customised content styles - which is unique to Webwriter- and outputting the document as well formed or valid XML, or HTML with an associated CSS file.

Anyone studying XML will appreciate Webwriter's ability to extract DTDs from documents. It takes away the graft of writing a DTD from scratch, though since the derived DTD isn't perfect, you'll need to do some extra work.

This isn't a beginner's tool for producing XML documents, but the documentation assumes you have sufficient knowledge of document design. In order to get the most from this package, you'll need to sit down and learn XML document design. But once you have this knowledge, you'll be able to use Webwriter to design compliant XML documents with ease.

The potential for XML on the Web is broad, and as specialised subsets of XML, such as MathML, become available for general use, the new standard will only be limited by your imagination. For an example, take a look at Interleaf ([www.interleaf.com](http://www.interleaf.com)), which is espousing the virtues of XML in e commerce and data management.

This program's definitely one of the best XML editors available and it's capable of maturing into an industry standard package.

Charlie Young

Webwriter

Price \$499 (A round (pounds)324)

Pros More content than any other XML editor available

Cons Not for the uninitiated, and not cheap either

Contact Stilo Technology

Phone (01222)483530

[www.stilo.com](http://www.stilo.com)

What is XML?

XML describes the structure of data, and is the first language to be developed specifically for the Web since HTML. The new standard lets you give custom attributes to every piece of data on a Web page. With XML you can define unique tags and use them for labelling particular packets of data or elements, such as (less than)bread(greater than)bagel(less than)/bread(greater than).

To use them, you label elements by enclosing them in a pair of tags, just as in HTML. These tags can be set within one another, but the order must always be respected, such as:

```
(less than)address(greater than)
(less than)number(greater than)21(less than)/number(greater than)
(less than)street(greater than)Pelham Road(less than)/street(greater
than)
(less than)town(greater than)London(less than)/town(greater than)
(less than)/address(greater than)
```

With this flexibility over HTML, you can use XML to define document structures. An XML document has two aspects - labelled elements and the DTD (Document Type Description).

The DTD is a set of rules assigned to a document. When you load a document, it's compared to the rules in the DTD, ensuring the elements are published appropriately and correctly. This is known as a valid document.

A well formed document conforms specifically to the rules established by XML. By defining the rules, the DTD defines the elements, their content, their relational context and their frequency of use. The content model can be defined as containing:

- \* Text
- \* Other elements only (which might individually contain data)
- \* Text and other elements
- \* Nothing (known as an empty element)
- \* Anything

Elements are named, and their use is defined in a declaration. The name lets this and other declarations refer to the elements by name.

The use of an element is defined by the number of times it can be placed within content - this might be once or several times. For instance, the above (less than)address(greater than) tags would carry the option of (less than)apartment number(greater than).

Other details of the DTD are:

- \* Attributes: additional information attached to a particular element
- \* Entities: data that's referenced from within a document
- \* Notations: these are used to declare non-XML entities, such as a graphics format

This is only a brief introduction to XML. For more advice and instruction, follow these links: <http://hotwired.lycos.com/webmonkey/98/41/index1a.html?tw=xml>

[www.w3.org/TR/REC-xml](http://www.w3.org/TR/REC-xml)

[www.geocities.com/SiliconValley/Peaks/5957/xml.html](http://www.geocities.com/SiliconValley/Peaks/5957/xml.html)

<http://xml.com>

COPYRIGHT 2000 EMAP Media Ltd.

COMPANY NAMES: Stilo Technology Ltd.--Product introduction

GEOGRAPHIC CODES/NAMES: 4EUUK United Kingdom

DESCRIPTORS: Web authoring software; Software product introduction

EVENT CODES/NAMES: 336 Product introduction

PRODUCT/INDUSTRY NAMES: 7372682 (Internet Server Software)

NAICS CODES: 51121 Software Publishers

TRADE NAMES: WebWriter (Web authoring software)--Product introduction

10/9/12 (Item 12 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group. All rts. reserv.

02253238 SUPPLIER NUMBER: 53404141 (THIS IS THE FULL TEXT)

Oracle plans XML support in 8i.(Oracle 8i database )(Product Announcement)

Seybold Report on Internet Publishing, 3, 4, NA(1)

Dec, 1998

DOCUMENT TYPE: Product Announcement ISSN: 1090-4808 LANGUAGE:  
English RECORD TYPE: Fulltext

WORD COUNT: 1679 LINE COUNT: 00133

TEXT:

Built-in database support will integrate with DOM on client side

Last month Oracle made public its plans for XML support in Oracle 8i, a new version of its flagship database that is optimized for the Internet.

Steve Muench, Oracle's XML technology evangelist, furnished us with details, many of which can be found in a new XML portion of Oracle's Web site ([www.oracle.com/xml](http://www.oracle.com/xml)).

#### XML functions in 8i

Oracle may not be the first database vendor to embrace XML, but its Oracle 8i XML implementation will be an eye opener for both customers and competitors. The built-in XML support is the most extensive of any leading relational database to date, and it is designed to dovetail with XML work at the W3C, a move that pressures Oracle's competitors to move in a similar direction.

The XML support comprises three facilities:

1. Oracle's own XML parser. Written in Java, it programmatically processes XML documents or fragments coming into or out of the database.
2. XML support in Oracle 8i's database-backed file system. The "file system" of the database can automate parsing and rendering of data between XML and the database.
3. Tag-aware searching by the ConText full-text engine.

Java parser. Oracle's fully conformant XML parser, written in Java, sits on top of the Java Virtual Machine built into 8i (see diagram). The parser always checks to see if XML documents or fragments are well formed; optionally it can be made to validate against a DTD as well.

The parser connects to two APIs: the Document Object Model (DOM) specified by the W3C and the Simple API for XML (SAX), which was built cooperatively by the XML developer community using the xml-dev mailing list. These building blocks will make it much easier for developers to write server-side Java applications that interact with data in a browser, using XML as a means to interchange and validate the data.

Up next, according to Oracle, is a PL/SQL interface for the parser.

Special treatment of XML files and metadata. The Oracle Internet File System (iFS) is one of the most exciting aspects of Oracle 8i, giving end users a "file and folder" view of the database. This means not only that the database can store files of any data type (something it does now as Binary Large Objects) but also that users will be able to drag and drop objects into the database as easily as dragging them into folders on their desktops.

Both user-defined and built-in metadata about the files may be entered as conventional fielded data, or may be fed to the database in **XML**.

Even more interesting, files that are **XML documents** get built-in support for defining, **parsing** and reassembling **XML documents** from **XML components**. Using Oracle's DTD-like iFS Document Type Definition, the administrator tells the database how to load documents of the new file type. According to Muench, "you should be able to map an element (and its subelements) as a fragment into a Character LOB." The database then has built-in support for **parsing** these **documents**, breaking them into **components** and re-assembling them for export. (Oracle speaks of database support for "rendering" **XML**-based file types, but what is meant is reassembling the document's components, not necessarily displaying them on the screen.)

Validation of the **XML**-based file type's content occurs when the file is saved, posted or received by e-mail into the Internet File System, leveraging the validation capability of the Oracle **XML** Parser.

**XML**-enabled searching. On the search side, Oracle's ConText engine, part of the Oracle 8i's InterMedia content-management facilities, now allows searches to be restricted to certain sections of a document, or even a fragment, based on the XML tags. This yields better precision, of course, and, coupled with ConText's integration with SQL queries, makes possible very precise queries with much less code (see example in box).

The tag-aware searching may be implemented regardless of whether XML documents are stored as single files or are chunked into pieces.

#### Application examples

Muench furnished several examples of how he expects developers to make use of XML with 8i. They illustrate just how broad the potential will be when this comes out in 1999.

Book collectors. The first example is book collectors. A large book collector could register an XML-based Book Catalog file type in its 8i database, and then request each bookstore supply its book data in that format. Because the Book Catalog is a simple text file, some stores could

simply e-mail their information. Those that happened to have an 8i database of their own could be queried directly by the collector's 8i database.

What's related. Another example is the "what's related" button in Communicator 4.5. Clicking on the button makes a request to Netscape's site to find related URLs. The server returns a set of related links (tagged as RDF), which the browser parses and displays.

As Muench pointed out, in this scenario, any client capable of sending an HTTP request and parsing XML output from the server can take advantage of XML-based Web services. And any Web server capable of responding to an HTTP request by returning appropriately formatted XML output can become an alternative to the same service. An Oracle white paper explains:

"For example, in the future Netscape could offer other vendors a chance to provide alternative 'What's Related' services by simply allowing the end user to select his favorite What's Related server in his browser preferences. In its implementation, each server might offer a different approach to deciding what's "related," but all would agree on the XML format of the suggestions they returned."

Oracle has designed its 8i XML support to make it easier and more cost-effective for developers to create such database-driven Internet information services.

Better formatting. Oracle is also exploring the possibilities of dynamic formatting based on XML's companion, the extensible style language (XSL). The idea will be to generate dynamically XSL style sheets that transform XML to HTML on a

per-user basis, taking the personalization offered by the CNN Custom News site (developed jointly with CNN) one step further.

Other potential applications include media asset management, e-commerce and integration between Web and legacy applications, all using a combination of XML-based data and metadata.

Looking ahead

The initial developer kits for the Oracle 8i XML Support are expected to be released in the "December-January" time frame, according to Muench, along with the first commercial release of 8i. The production release of the XML Support will follow some months later. The plan is to release 8i on multiple platforms—certainly NT and several flavors of Unix—at the get-go.

Looking farther ahead, Muench said that Oracle is considering a mapping of XML to the hierarchical object views of Oracle 8 for future releases. Oracle is already involved with W3C XML Schema efforts and will have a vested interest in shaping any forthcoming standard for XML query languages, according to Muench.

Our take

The XML support in Oracle 8i gives the database developer a set of tools for exchanging and processing data in tag-delimited form instead of as comma- or tab-delimited data streams. The tools will make it much easier to build server-to-server applications (such as syndication and e-commerce) that will play an increasingly prominent role as the Web matures as a communication medium.

For those with XML-encoded documents, the support for XML document shredding and assembly marks the first time a relational database vendor has introduced a capability that many document-management vendors (Xyvision, Texcel, STEP and so forth) previously had to write on their own. (Two object-database vendors, Poet and Object Design, offer such functionality.) By itself, this facility does not make 8i an XML-enabled editorial system. But for enterprising integrators, it does make 8i attractive as a platform for XML-based publishing systems.

The original intent of the XML committee was to bring generic markup to a broader audience, especially to those involved with the Web. Netscape and Microsoft have been onboard on the client side for some time, but Oracle's endorsement is equally significant: It will provide server-side XML tools to a huge base of mainstream database and Web application developers.

Mark Walter

Harbinger of Change in Database Technology

Oracle 8i, the next generation of Oracle's flagship database, signals several important changes in database technology:

First, the absorption of functions once reserved for a Web server or separate application servers into the database itself. Positioning itself



as a complete development platform, Oracle has embedded a Java virtual machine, as well as an HTTP server, inside the database. Oracle's JVM, written to the Sun Java specification, is optimized for database operations. It does not, however, support Netscape or Microsoft APIs.

Second, a file system interface to the database. This could be the most visible difference in 8i to end users. The 8i database supports the Windows SMB protocol, making it look like a network file system. In short, users can map the database to a drive letter in Windows Explorer on their PC desktops. "We like to think of it as the 'O' drive," joked Steve Muench, Oracle's key XML evangelist. In addition, an 8i database also can be accessed via HTTP, FTP, POP and SMTP protocols.

Third, the incorporation of XML-specific functions. Anticipating XML-enabled Internet services, Oracle has embedded XML support as a resource to the database, its file system and its full-text search engine. Object Design has also added XML support to its database.

COPYRIGHT 1998 Seybold Publications Inc.

COMPANY NAMES: Oracle Corp.--Product enhancement  
GEOGRAPHIC CODES/NAMES: 1USA United States  
DESCRIPTORS: Software product enhancement; DBMS; XML  
EVENT CODES/NAMES: 331 Product development  
PRODUCT/INDUSTRY NAMES: 7372421 (DBMS)  
SIC CODES: 7372 Prepackaged software  
TICKER SYMBOLS: ORCL  
TRADE NAMES: Oracle8i (DBMS)--Product enhancement  
FILE SEGMENT: CD File 275

10/9/28 (Item 28 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2002 The Gale Group. All rts. reserv.

01552817 SUPPLIER NUMBER: 13343996 (THIS IS THE FULL TEXT)

Datalogics adds OS/2 SGML editor to suite: new WriterStation features API, Presentation Manager user interface. (The Latest Word) (WriterStation/PM Standard Generalized Markup Language-compliant document editing software package) (Brief Article) (Product Announcement)

Seybold Report on Publishing Systems, v22, n7, p24(1)

Dec 21, 1992

DOCUMENT TYPE: Product Announcement ISSN: 0736-7260 LANGUAGE:

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 826 LINE COUNT: 00068

TEXT:

New WriterStation features API, Presentation Manager user interface  
Adding to its portfolio of SGML-based products, Datalogics has introduced WriterStation/PM, an OS/2 SGML editor. Based on Datalogics's WriterStation for DOS, WriterStation/PM utilizes the Presentation Manager graphical user interface to create a visually more attractive product than its character-based DOS cousin.

Improving on TextWrite. Readers may recall that several years ago IBM took WriterStation for DOS and also created an OS/2 SGML editor, called TextWrite (Vol. 19, No. 9, pp. 18-20). Although WriterStation/PM looks similar to TextWrite, it differs in several respects: it uses a different SGML parser and a different spelling checker, and it includes an interprocess communication programming interface.

The parser is based on the "SGMLS" parser donated by Charles Goldfarb to the SGML user community. Any valid DTD may be used. The parser, invoked on command, parses an entire file without leaving the editing session.

The batch parser is complemented by technology that validates portions of a document within WriterStation/PM, making possible real-time SGML validation during editing. Invalid structures are identified through error displays. Tagging feedback during editing is accomplished by partial parsing of the document, using a condition file set up to match the DTD.

The spelling checker, by Proximity, supports user-defined dictionaries, which may be shared across a network. The checking process

can be run interactively, during editing or as a batch pass, after which the list of flagged words can be edited and the corrections automatically run against the original file.

The API, based on Dynamic Data Exchange (DDE) interprocess communication, is the most significant difference between TextWrite and WriterStation/PM. With it, the SGML editor can be linked to other programs to create custom applications.

Such a link would make it possible to extract or verify information external to a document; invoke custom dialog boxes for selecting tags or attributes or entering data by templates; display custom action bars and menus; or launch third-party software. For example, the program could be linked to a database in a way that would extract or validate information that came from outside of the document, such as part numbers or prices, without leaving the editing session.

Thankfully, the editor does not sacrifice any of the powerful features of WriterStation for DOS--programmable keys, a macro language and a sophisticated search and replace capability that can restrict searches to specific tags or attributes as well as text strings.

Given the similarities between the two products, the improvements Data-logics has made and the fact that TextWrite has never lived up to its potential in the market, WriterStation/PM essentially replaces TextWrite as the leading candidate among prospective buyers of OS/2-based SGML editors.

Styles, graphics, available now. One nice aspect of WriterStation/PM (and one that is typical of SGML editors running on graphical environments) is that style files may be set up to match a DTD. The styles cover font, size, color, column width and justification mode of different elements to give the user a simulation of formatted galleys. Up to 128 distinct element format displays are supported.

Like TextWrite, WriterStation/PM allows graphics to be embedded within the SGML document. WriterStation/PM will automatically launch appropriate resident graphics applications for viewing and editing of graphics during a document editing session.

WriterStation/PM is intended to be used as an off-the-shelf word processing tool for structured documents, but unless you adhere closely to well-known DTDs (e.g. CALS), some customization will be required to configure it for your application. (This is true for any SGML editor.) Data-logics offers two levels of software customization. The first is a developer's toolkit, which includes the API support and sample examples of code. With it, the developer or user can customize menus and tailor the program as desired, as suggested above.

All of those changes are specific to one DTD. If you want to adapt WriterStation/PM to different DTDS, you'll need the second customizing level: WriterStation Tools, a separate option.

WriterStation/PM is available now at a cost of \$1,650 for a single end-user license. That price includes the developer's toolkit, which is bundled with the package. WriterStation Tools is priced separately at \$7,500.

New batch formatter. In a separate announcement made this month at CALS Expo, Data-logics announced DL Composer, a Unix-based batch formatter that accepts SGML content and FOSI style files and automatically composes, paginates and produces output. DL Composer is similar to the formatter Data-logics built for the JCALS contract, in that it is built from the Data-logics Typesetting Library and is not a variation of Pager (see Vol. 21, No. 11, pp. 24-25 for details). Pricing and availability had not been determined before we went to press.

COPYRIGHT 1992 Seybold Publications Inc.

COMPANY NAMES: Data-logics Inc.--Product introduction

DESCRIPTORS: Product Introduction; Word Processing Software

SIC CODES: 7372 Prepackaged software

TRADE NAMES: WriterStation/PM (Word processing software)--Product introduction

OPERATING PLATFORM: OS/2 PM

FILE SEGMENT: CD File 275

10/9/33 (Item 2 from file: 621)

DIALOG(R) File 621:Gale Group New Prod.Annou.(R)

01753648 Supplier Number: 53205254 (THIS IS THE FULLTEXT)

**Oracle Enhances Internet Platform With XML Support.**

PR Newswire, pl048

Nov 11, 1998

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 1036

**TEXT:**

Oracle8i(TM), Oracle(R) Application Server, and Internet Development Tools  
To Include Full Support for W3C Standard Data Language  
XML Enables Portability, Scalability, and Interoperability of  
Data-Driven  
Systems

SAN FRANCISCO, Nov. 11 /PRNewswire/ -- At Oracle OpenWorld(R) today, Oracle Corporation announced sweeping support for the eXtensible Markup Language (XML), the cross-platform data language now being defined by the World Wide Web Consortium (W3C), and the clear emerging standard for defining, representing, and dynamically sharing information across the Internet. Integrating XML into Oracle's Internet platform will make it dramatically easier for companies to exchange and integrate information stored in databases and then repurpose the information for building Internet applications.

Comprehensive support for designing, building, deploying, and managing XML applications will be fully integrated into the Oracle8i(TM) database, Oracle(R) Application Server 4.0, and Oracle's Internet development tools. XML extends the interoperability of Oracle's recently unveiled Internet platform: the Oracle8i and Oracle Application Server 4.0 duo.

"XML has quickly emerged as a key enabling technology for improving communications between Internet, data warehousing, and e-commerce applications," said Mark Jarvis, senior vice president of marketing at Oracle Corp. "Oracle is committed to delivering comprehensive and coordinated XML support across all its divisions and product lines. This support will allow present and future Oracle customers to fully exploit the power, flexibility, and interoperability of Internet-standard computing."

In addition to the upcoming native XML support, Oracle's Internet platform integrates Java, JavaBeans, Enterprise JavaBeans, HTTP, IIOP, UML, and CORBA standards. This comprehensive technology lineup will enable IT organizations to build portable, scalable, and interoperable distributed Web applications that fully leverage open Internet standards in five key business areas:

- \* Electronic commerce: XML will play a major role in the exploding market for business-to-business electronic commerce. XML allows organizations to quickly and easily define cross-platform data formats for Internet-based electronic data interchange, opening vast opportunities for entire industries to inexpensively transact business over the Internet. Oracle will provide complete and unparalleled support for defining, processing, and managing XML e-commerce data formats and transactions.

- \* Internet content management and delivery: Oracle will provide native support for storage, retrieval, and querying of XML content, enabling database-driven Web sites to serve up more relevant search results, and truly personalized dynamic content. Also, by fully integrating XML support into its proven content management and delivery architecture, Oracle's Internet Computing platform will give XML applications all the security, administrative controls, performance, availability, and scalability IT leaders demand of professionally managed enterprise information systems.

- \* Messaging and applications integration: One of XML's strengths is its ability to seamlessly integrate systems and applications. Oracle's comprehensive XML support will take full advantage of this inherent XML capability and enable corporations to fully leverage XML to smoothly integrate business processes. Oracle will provide application integration by applying XML to its enterprise messaging infrastructure, providing a robust, scaleable, open platform for transparently integrating front- and back-office systems.

- \* Data warehousing: XML's natural interoperability will significantly

impact enterprise data warehousing efforts in the future, by enabling automated exchange and transformation of enterprise metadata between competing vendors' databases, repositories, and business intelligence applications. Oracle's XML support will provide a complete and open platform for integrating enterprise data warehousing and analysis architectures with corporate applications.

\* Application development: Oracle's world-class family of development tools will provide managed, team-oriented support for robust XML development, debugging, testing, and maintenance. IT teams will be able to exploit Oracle8i's and Oracle Application Server's powerful XML capabilities to ease development of personalized, flexible, and extensible Web applications through Oracle's world-class family of development tools. Oracle tools will make it easy to build database-driven Internet applications that exploit XML on the Oracle Internet Computing platform.

Oracle XML Support Enhances Oracle8i and iFS; Crosses Entire Internet Platform

Oracle's comprehensive XML support, which will extend from Oracle8i to Oracle Application Server 4.0 to Oracle Tools, is based on industry standards that enjoy broad support throughout the computer industry, and firmly establishes Oracle's Internet platform as the platform of choice for IT executives, programmers, and third-party software providers pursuing XML's rich content and interoperability benefits.

XML support in Oracle8i is comprised of three key components: The Oracle XML Parser provides programmatic processing of XML documents or document fragments. Oracle iFS (Internet File System), the new next-generation file system included with Oracle8i that gives users "write once, read anywhere" content in a heterogeneous enterprise, will include XML support to automate parsing and rendering of data between XML and the database. In addition, XML-enabled "section searching" in Oracle interMedia will provide more precise searches over structured documents.

Oracle: Committed to Open Industry Standards

Today Oracle also announced several XML related initiatives underway within the company. Oracle is actively participating in the World Wide Web Consortium (W3C) process with other corporations committed to furthering open standards, including IBM, Netscape, and Platinum Technologies. Together under the W3C banner, Oracle and other consortium members will help drive and shape XML standards such as XML-Data, XSL, XQL, and XLink. Oracle is also a cosubmitter to the Object Management Group (along with IBM, Unisys, Platinum Technologies and others) for the Structured Metadata Interchange Format (SMIF), an XML-based proposed technology for transporting data between repositories.

Support for XML will be included with Oracle8i, which is expected to be available at the end of this year. Oracle Application Server 4.0 is expected to support XML in the first half of 1999. Oracle JDeveloper(TM) is expected to add support for XML in the first quarter of 1999. Oracle WebDB and Oracle Developer are expected to add support for XML in the second half of 1999. For more information about Oracle's XML strategy, go to (URL) <http://www.oracle.com/xml/>.

Oracle Corporation is the world's leading supplier of software for information management, and the world's second largest independent software company. With annual revenues of more than \$7.5 billion, the company offers its database, application server, tools, and application products, along with related consulting, education, and support services in more than 140 countries around the world. For more information about Oracle, please call 650-506-7000. Oracle's World Wide Web address is (URL) <http://www.oracle.com>.

NOTE: Oracle is a registered trademark and Oracle8i, Oracle OpenWorld and JDeveloper are trademarks or registered trademarks of Oracle Corporation.

COPYRIGHT 1999 Gale Group

COPYRIGHT 1998 PR Newswire Association, Inc.

PUBLISHER NAME: PR Newswire Association, Inc.

COMPANY NAMES: \*Oracle Corp.

GEOGRAPHIC NAMES: \*1USA (United States)

PRODUCT NAMES: \*7372000 (Computer Software)

INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)

NAICS CODES: 51121 (Software Publishers)